ALCOHOL, DRUGS AND DRIVING

HEARING

BEFORE THE

SUBCOMMITTEE ON ALCOHOLISM AND DRUG ABUSE

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

ON

TO EXAMINE WHAT EFFECT ALCOHOL AND DRUGS HAVE ON INDIVIDUALS WHILE DRIVING

AUGUST 5, 1982

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Marihuana and Driving: The Sobering Truth, by Peggy Mann, from Readers Digest, May 1979 issue 46

ALCOHOL, DRUGS AND DRIVING

THURSDAY, AUGUST 5, 1982

U.S. SENATE,
SUBCOMMITTEE ON ALCOHOLISM AND DRUG ABUSE
OF THE COMMITTEE ON LABOR AND HUMAN RESOURCES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:32 a.m., in room 4232, Dirksen Senate Office Building, Senator Gordon J. Humphrey (chairman of the subcommittee) presiding.

Present: Senators Humphrey, Quayle, and Pell.

OPENING STATEMENT OF SENATOR HUMPHREY

Senator HUMPHREY. Good morning. The Subcommittee on Alcoholism and Drug Abuse this morning will hear testimony on the problem of alcohol and drugs and driving—a subject of immediate, critical concern to the Nation. I want to thank all of our distinguished witnesses, many of whom have traveled substantial distances at their own expense to share with us and the public their knowledge of the problem and their experiences and ideas for solutions.

Drunk driving is not a new problem. Ever since man began to consume alcohol, society has had to deal with the deleterious effects of too much alcohol on an individual's coordination, judgment, reaction time, as well as other physiological and psychological effects. Twentieth century technology simply added a new dimension to the problem by putting a lethal weapon—the automobile—within easy reach of the drinker.

More violent deaths are due to traffic accidents than any other cause—approximately 49,000 in 1977. Traffic accidents also play a significant role in serious injuries in the United States, causing almost 2 million injuries in that same year, 1977.

Between 40 and 55 percent of drivers who are fatally injured have alcohol concentrations in their blood above the legal limit, and this figure rises to 55 to 65 percent in single-vehicle crashes. Overall, the total societal cost of drunk driving has been estimated anywhere from $5 to $25 billion a year. Even the most conservative figure is far more than society can afford, and this does not include the needless human costs that can never be calculated.

In addition, we are beginning to hear reports of driving after drug use and accidents involving drivers who have used marihuana or other illegal drugs. Scientists are just beginning to collect data on the concentration of various drugs in the blood of fatally injured

drivers, and to conduct studies of the effects of drugs on driving ability.

Of increasing concern is the combination of drug and alcohol abuse and its impact on the incidence of traffic accidents. As we are all painfully aware, many of our young people are experimenting with marihuana, and surveys show that drinking and driving often accompany marihuana use. To address these concerns, witnesses this morning will describe the present state of knowledge about drugged driving and detail the similarities and differences in drugs and alcohol which will determine our approach to the problem of drugged as well as drunk and drugged driving.

The current public demand to find solutions to the problem of drunk driving is certainly heartening, as it has been a stimulus to all levels of Government to act. This Congress has previously held hearings on the subject and Federal legislation intended to encourage and assist State and local efforts has been approved unanimously by the Senate. The recently appointed Presidential Commission on Drunk Driving has held its first meetings and we look forward to hearing from Governor John Volpe, Commission Chairman, concerning the efforts of the Commission to heighten public awareness of the problem and to stimulate the pursuit of solutions.

Our purpose in holding these hearings today is to explore the state of the art concerning drugged driving, to spotlight the newest efforts at the Federal, State, and local levels to combat drunk driving, and to facilitate the process of communication between all of those who are involved in this field.

Because the primary responsibility for enacting and enforcing drunk driving legislation is at the State and local level, the States have, in effect, become laboratories for testing new approaches. We hope to highlight what has worked and what has proven less effective in some of these tests.

Particularly important has been the work of citizens groups such as Mothers Against Drunk Driving [MADD] and Remove Intoxicated Drivers [RID]. I think it is only fair to say that without the hard work and tireless dedication of these volunteers, we would not be at the point where we are today of making substantial changes in our approach to this problem. These groups serve as a most valuable reminder of what private citizens can accomplish by banding together and letting their elected representatives know that there is a problem to which the public demands a solution. In addition, they have achieved immeasurable success in raising public awareness of the gravity of the drunk driving problem.

This morning, we will be receiving testimony about the newest of these groups—SADD, or Students Against Driving Drunk. I look forward to learning the details of this innovative effort to involve young people at a time in their lives when they most effectively will be able to exert peer pressure on their fellow students to alter driving and drinking behavior before it becomes firmly established.

In response to the demand, for new approaches, many States have appointed task forces to examine the existing drunk driving programs and to make recommendations for a renewed, comprehensive approach. Massachusetts was one of the first States to appoint a State task force on drunk driving, and we are fortunate indeed this morning to have Governor Edward King here to de-

scribe the work of the task force and his experience with the implementation of its recommendations.

The State of Maryland has also assumed a leadership role in its efforts to deter individuals from driving while under the influence of alcohol. We will hear testimony this morning concerning the work of the Montgomery County Task Force, and also details of Maryland's comprehensive DWI program which includes enforcement, prevention, rehabilitation, and treatment.

It is important that we press forward in our efforts to develop new and creative approaches by combining the expertise of government, community groups, and voluntary associations to bring the unique talents of each to bear on this devastating national problem. Our witnesses today are to be commended for their dedication in seeking permanent solutions and we look forward to hearing their thoughts on this issue.

At this point, we will insert in the record the statements of Senator Hatch, chairman of the full committee, and Senator Denton.

[The statements referred to follow:]

PREPARED STATEMENT OF SENATOR ORRIN G. HATCH

Senator HATCH. Mr. Chairman, I applaud subcommittee chairman, Senator Humphrey, for his efforts in conducting this hearing today to discuss alcohol, drugs, and driving. These topics are timely; the tragedies we as a Nation suffer each day on our highways and in our neighborhoods from the drunk driver and the driver who misuses drugs are disturbing. I look forward to the testimony received from these esteemed panels of witnesses.

The facts on driving, drinking, and drugs, are frightening:

One fact that is especially bothersome to me is that in my home State, Utah, 68 percent of the drivers in alcohol-related crashes are under 30. This figure is representative of the problem nationwide and multiplied when you add drug-related accidents. That means our society is possibly deprived of a future doctor, a mother, or a Supreme Court judge virtually every other day of the year.

The economic costs of alcoholism, alcohol abuse, and drug abuse as related to motor vehicle accidents in our country are over $5.14 billion a year. That is more than three times the operating budget of the State of Utah!

Alcohol and drug-related auto accidents touch each of our lives, if not directly, of either a loved one, a friend, or a neighbor. Misuse and abuse of alcohol and drugs can and does pose a most serious threat to the economic, social, and emotional health of our society. The magnitude of the problem is so large that it cannot be ignored by Congress.

As one step, I urge and support all the States in their efforts to develop strong laws against the drunk driver. In this regard, I look forward to the testimony of Governor King of Massachusetts, Mr. McDuffy of New Hampshire, and Mr. Bland of Maryland, to learn more about their State initiatives.

It is important that decisions involving punishment of drunk drivers are left to State and local governments. Every locality confronts different conditions and should have discretion in determining the appropriate punishment. I praise Utah's tough drunken

driving laws and am proud to be a Senator from this model State. This past year, the Utah State Legislature mandated that upon first conviction for driving under the influence, one of three options will be mandatory: jail, treatment, or work assignment at a rehabilitation center. Under Utah law, conviction of driving under the influence results in automatic revocation of a driver's license for 1 year, in addition to a mandatory fine of $299 and a possible fee of up to $150 for education and treatment programs. I am further pleased to report that as part of President Reagan's initiatives to direct the attention of each citizen toward solving this major national problem, Utah has been targeted as one area across the country which will put into effect special programs to get drunk drivers off the highways. Specifically, the U.S. Transportation Department announced that in Utah it will help with enforcement of our strict State laws. At this time, I would also encourage similar strict laws against those drivers who misuse drugs while driving.

But, this is only one way we can rid the roads of the drunken driver. As a Member of Congress, I have focused on the prevention of diseases—and indeed alcohol and drug abuse in any form is preventable. It just takes a little prudence and some education. I applaud private groups, like those represented at this hearing, that will pursue efforts to inform citizens of the hazards of combining drinking, drugs, and driving.

Finally, it is essential to target efforts to rehabilitate the drug user and alcoholic driver. Rehabilitation programs are an important aspect of reestablishing alcoholic and drug-dependent citizens into the mainstream of society as healthy individuals.

Again, I firmly pledge my support for remedies, public and private, aimed at eliminating the unwarranted deaths, costs, and tragedies caused by drivers who drink or use drugs.

At this time I ask unanimous consent to insert into the record the statement of the National Association of Independent Insurers which describes their work to curb the problems of drinking, drug use, and driving. These are serious problems and the NAII should be applauded for their efforts in developing a model program to effectively deal with drug users, alcohol users, and driving.

[The statement referred to appears on p. 122]

PREPARED STATEMENT OF SENATOR JEREMIAH DENTON

Senator DENTON. Mr. Chairman, I want to commend you for convening this hearing to focus the Senate's attention on the tragic toll in human lives and human suffering inflicted by drunk drivers and drivers under the influence of other drugs. This is a critical national problem that is only recently receiving the attention it deserves.

The problem of drunk drivers and the carnage they have wrought is an all too familiar one. A new and equally dangerous dimension has been added with appearance on the road of drivers impaired by control substances other than alcohol. Whatever the drug causing the driving impairment, the result is identical; a driver who is unable to adequately control 2,000 or more pounds of steel hurtling down a highway.

The litany of statistics linking drug impaired drivers with traffic accidents and deaths has been recounted numerous times. Few effective changes have been made in the way States face the menace posed by impaired drivers in spite of the public anger and indignation surrounding especially tragic accidents. It is almost as if Americans have become inured to the tremendous loss of life and the anguish of relatives who suffer the loss of a loved one at the hands of a driver who had been drinking or taking drugs.

Mr. Chairman, I am pleased to say that I think that this situation is changing. More and more Americans are outraged at the number of impaired drivers traveling our highways and the ease with which they can escape prosecution in those infrequent instances where an arrest is made. Through organizations of private citizens like MADD, mothers against drunk driving, the American public is becoming more and more intolerant of those who drink or use drugs and then climb, or fall, in behind the wheel.

I am also delighted that the President has appointed a commission on drunk driving, under the leadership of the Honorable John Volpe. I know that this Commission will study the problem carefully and thoroughly and propose many valuable recommendations. I am pleased that Mr. Volpe is able to appear before the subcommittee and give us a report on the Commission's progress to date.

Efforts such as these will no doubt heighten the public's awareness and serve as a catalyst to induce national and local officials to address the alcohol and drug impairment problem even more vigorously.

It appears that one of the main impediments to an effective prevention program has been the inability of many States to enforce drunk driving laws already on the books. There is no question that more can and should be done with respect to driving while impaired by other drugs. Recent research developments make it likely that a testing procedure for detecting drugs in the systems of impaired drivers may be available in the not too distant future. But laws developed using these test results, like the current drunk driving laws, will be much less effective as a deterrent if they are only casually enforced or if those accused successfully plea bargain for much less severe penalties.

The United States has much to learn from the European countries in the field of prosecuting those arrested for driving while drunk or under the influence of other drugs. Penalties in European countries are predictable and severe, and it has the effect of deterring people from driving while impaired. I believe that many States are rethinking the way that they attack the impaired driver problem, and I encourage this reevaluation.

Mr. Chairman, I am sure that the expert witnesses you have called here to testify will address all these issues. I look forward to reviewing their testimony.

Thank you.

Senator HUMPHREY. We are privileged to have with us this morning the Chairman of the Presidential Commission on Drunk Driving, Gov. John A. Volpe.

Good morning, Governor. We are delighted and truly privileged to have you with us this morning.

STATEMENT OF JOHN A. VOLPE, CHAIRMAN, PRESIDENT'S COMMISSION ON DRUNK DRIVING

Mr. VOLPE. Thank you very much, Mr. Chairman. I am extremely pleased to appear before you and this subcommittee to address this problem of drunk driving and to highlight for you the recommendations of the administration and the role of the President's Commission on Drunk Driving in furthering those recommendations.

Drunk driving, as you have indicated, Mr. Chairman, is one of our Nation's most serious public health and safety problems. Over the past 10 years, millions of people have been seriously injured and 250,000 have died. Let me repeat that: 250,000 have died—that is 5 times as many as were killed in Vietnam over a 10-year period—in motor vehicle accidents involving alcohol.

Such crashes account for about one-half of all of our highway fatalities. Apart from the human suffering and the family disruption it causes, drunk driving has a high economic cost to the country, estimated at over $20 billion a year. As a result of this problem, support of many Members of the Congress, and President Reagan's own concern, he established a Presidential Commission on Drunk Driving to support the public concern and awareness that currently exists.

I might say that I do not think the climate has ever been better to try to do a real job in this field than today. Specifically, the functions of the Commission, as stated in Executive Order 12358 signed by the President on April 14, 1982, are: One, to heighten public awareness, as you indicated, Mr. Chairman, of the seriousness of the drunk driving problem; two, to persuade States and communities to attack the drunk driving problem in a more organized and systematic manner, including plans to eliminate bottlenecks in the arrest, trial, and sentencing process that impair the effectiveness of many drunk driving laws; three, to encourage State and local officials and organizations to accept and use the latest techniques and methods to solve the problem; and, four, to generate public support for increased enforcement of State and local drunk driving laws.

Now, in order to achieve these objectives, the Commission has established some specific goals to be accomplished during the 1-year period of the Commission's existence.

Specifically, these goals are: encourage all Governors, county executives and mayors to form task forces to examine their drunk driving control system, to develop solutions to identified problems, and to increase public awareness of the problem. Currently, 31 States have established such task forces or study commissions and we know of many other States that are in the process, hopefully, of doing so.

Critical audiences for the Commission Chairman and the members to address would be Governors, county and city executives, State legislators, and the media—particularly publishers and journalists.

Commission members will make presentations to highway safety associations and organizations, such as the International Association of Chiefs of Police, the National Association of Governors'

Highway Safety Representatives, and so forth, and also to other national fraternal, and social organizations, such as Rotary, Elks, Moose, the American Legion, the VFW, the Jaycees, the Knights of Columbus, and many others.

Commission members will attend State task force meetings on a selected basis; that is, when there is a kickoff, if there are major hearings, or as requested by States.

The Commission members will be advocates of existing materials through all of the communication channels available to them. As new and improved systems and procedures are implemented at the State and local level, the Commission can serve as a clearinghouse for sharing this information among all States and communities. The Commission will examine long-term preventive programs and identify actions that can be taken.

The Commission, as you know, Mr. Chairman, is composed of 26 members appointed by the President and 4 members designated by the majority leader of the Senate and the Speaker of the House. Senators Dole and Pell and Representatives Hansen and Barnes serve on the Commission.

In order for the functions and goals of the Commission to be most effectively accomplished, we have established three committees to address specific areas of concern. The committees and their charges are: Education and Development Committee, to encourage the development and institution of a public and private sector information and education program which is designed to: One, increase public awareness of the drunk driving problem; stimulate greater efforts by local community action groups; three, establish social norms which deter drunk driving; four, establish long-term education and prevention programs; five, encourage the availability of effective treatment programs.

The second committee is the Enforcement and Adjudication Committee, to encourage enhanced enforcement, prosecution and adjudication of the drunk driving offense through increased use of: One, selective enforcement techniques; two, improved hardware and training; three, effective prosecution and sanctioning; four, improved assessment and followup in order to establish effective deterrent programs for the general driving population and apprehended drunk drivers.

The third committee is the Executive and Legislative Leadership Committee, to encourage public and private sector executives and organizations and legislative leaders at State and local levels to support enhanced, systematic drunk driving programs that include: One, coordinators at the State and local levels; two, financial support mechanisms; three, emphasis through Government and private sector policy statements; and, four, equitable and enforceable laws.

Our first committee, the Executive and Legislative Leadership Committee, has just held its first meeting and public hearing in Oklahoma City. I was present there and I can tell you the interest was tremendous. We had 28 different witnesses that testified in the various sectors, both the public and private end of it, and I do not think there is any question in my mind that we reached probably as many as 8 to 10 million people during the course of those hearings and the meetings because I did three TV programs in 2 hours.

Some of you have done that; I do not know. It is not too easy, but the response was just great and I think we will be holding at least three or four more of these meetings and hearings.

Before closing and attempting to answer any questions you may have, I would like all of you to reflect for a minute. If any of us or all of us could feel that during the course of our entire lifetime we could save one human being's life, I am sure you would agree it would give us great inner satisfaction if we felt that we had done that. Just think of how much greater satisfaction we would all have if we won this war against drunk drivers.

In only four States—and I do not mean to disparage any great jobs that have been done elsewhere, but I just happen to have these four statistics available. In four States—Maryland, New York, Illinois and, of course, I have to have Massachusetts—so far this year, almost 700 fewer deaths have taken place from drunk driving accidents than during the same period last year. That could add up to, in all 50 States, between 5,000 to 7,500 human beings who at the end of the year will be living instead of being killed.

Are our efforts worth it—your efforts, ours, the whole country's? You bet your life they are. Mr. Chairman, I believe the drunk driving problem in this country can be significantly reduced. It takes initiative and leadership at the State and local level, combined with support at the national level. I believe we have those ingredients. They are not all in place today.

I believe we will see effective programs implemented and sustained. That concludes my statement. I would be pleased to answer any questions, Mr. Chairman.

Senator HUMPHREY. Thank you, Governor.

I want to welcome my colleague, Senator Quayle. Do you have an opening statement, Senator Quayle?

Senator QUAYLE. Yes, I do, Mr. Chairman. I will be very brief. First of all, I want to pay my compliments to you for your continued interest in this issue. You and I recently chaired a joint hearing on alcoholism and drug abuse and this is sort of a followup. I appreciate the opportunity to be here and commend you for your efforts and your leadership in this area.

I want to pay my respects to Governor Volpe and wish him the very best, and I certainly appreciate his testimony.

I do have a short statement. I would like to say that if there was a plane crash every day in the United States that was caused by a pilot who was flying under the influence of drugs or alcohol that resulted in the death of 70 Americans daily, you know darned well that this country would be outraged and up in arms over this particular situation.

Well, that happens to be the case, because every day in the United States 70 Americans do die in crashes, but they are not in airplanes; they happen to be in automobiles. They are not the result of an impaired pilot; they happen to be a driver who is drunk or drugged.

I ask the question, Mr. Chairman, where is the outrage? The outrage would certainly be there if these planes were going down because of drunkeness or drug impairment. Airline safety is a subject that is not taken lightly in our Nation. Great concern, caution and

care is exercised to prevent deaths and injuries that result from a plane crash.

If a crash happens to occur, the press convenes on the scene, along with the Aeronautics Safety Board. The country joins in an ensuing moratorium until the cause of the crash is uncovered and we are assured that it will not happen again.

I am sure you know exactly what I am talking about in regard to all the efforts that go into the airplane crash. But an automobile crash is sort of written up and time goes on.

Despite the fact that drunk driving is the most common form of violent death in the Nation, no public outcry is really heard. There are a few people, such as yourself, the chairman of this subcommittee and other members of the committee that are interested.

In fact, I use caution in saying this, but I believe that, unfortunately, drunk driving has become an accepted part of American life. We read the horror stories. Let me cite a few: a 5-week-old baby killed while riding to a Christmas pageant to play baby Jesus along with his mother and two brothers. We barely pause long enough to let the news sink in before we are off in our own cars to possibly face the same fate.

Excuses are made; people talk and say we should not do it, but it goes on. Certainly, we do not want to embarrass our neighbors with the stigma of being an alcoholic or drunk driver; it is socially unacceptable. But there does not seem to be a real stigma of someone who has been drinking and then gets behind the wheel. Where is that stigma?

It is not an easy problem. It is a complex problem, but I hope that we can sit down and discuss this in a rational way and focus on it. If three people would sit down together and discuss the issue, you would have one person talking about highway safety, another addressing the subject of police, the courts and enforcement, and a third would be talking about drugs, addiction, alcoholism, and health.

But the complexity is absolutely no excuse for inaction. We have got complex problems we have got to face and we have got to deal with. It does not explain nor does it justify our disinterest or apparent avoidance of this problem.

I want to again commend you, Mr. Chairman. I look forward to the other testimony. I take great interest in a constituent of mine who will be on the second panel—Roger Maickel, who is the head of the Department of Pharmacology and Toxicology of Purdue University, which just happens to be the university that my wife graduated from. So, I have more than a slight interest in hearing his testimony as well.

I thank you for the time in allowing me to make an opening statement. I would ask unanimous consent that my entire statement would appear in the record.

Senator HUMPHREY. Without objection.

[The prepared statement of Senator Quayle follows:]

Senator Dan Quayle

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STATEMENT OF SENATOR DAN QUAYLE FOR HEARING ON ALCOHOL, DRUGS AND DRIVING

IF THERE WAS A PLANE CRASH EVERY DAY IN THE UNITED STATES, CAUSED BY A PILOT WHO WAS FLYING WHILE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL, THAT RESULTED IN THE DEATHS OF 70 AMERICANS DAILY....YOU'D BETTER BELIEVE THAT THE COUNTRY WOULD BE UP IN ARMS CLAMORING FOR SOMETHING TO BE DONE ABOUT THE PROBLEM. WELL, EVERY DAY IN THE UNITED STATES 70 AMERICANS DO DIE IN CRASHES....BUT THEY ARE IN AUTOMOBILES. AND THEY ARE THE RESULT OF AN IMPAIRED PILOT... THE DRIVER WHO IS DRUNK OR DRUGGED.

AIRLINE SAFETY IS A SUBJECT THAT IS NOT TAKEN LIGHTLY IN OUR NATION. GREAT CONCERN AND CAUTION AND CARE IS EXERCISED TO PREVENT DEATHS AND INJURIES THAT RESULT FROM A PLANE CRASH. IF A CRASH OCCURS, THE PRESS CONVENES ON THE SCENE, ALONG WITH THE AERONAUTICS SAFETY BOARD, AND THE COUNTRY JOINS IN THE ENSUING MORATORIUM UNTIL THE CAUSE OF THE CRASH IS UNCOVERED AND WE ARE ASSURED IT WILL NOT HAPPEN AGAIN.

THIS IS NOT THE CASE IN OUR RESPONSE TO AUTO CRASHES. DESPITE THE FACT THAT DRUNK DRIVING IS THE MOST COMMON FORM OF VIOLENT DEATH IN THE NATION, THERE IS NO PUBLIC OUTCRY. IN FACT, I BELIEVE THAT DRUNK DRIVING HAS BECOME AN ACCEPTED PART OF AMERICAN LIFE! WE READ THE HORROR STORIES....A FIVE WEEK OLD BABY KILLED WHILE RIDING TO A CHRISTMAS PAGENT TO PLAY THE BABY JESUS, ALONG WITH HIS MOTHER AND TWO BROTHERS... AND WE BARELY PAUSE LONG ENOUGH TO LET THE NEWS SINK IN BEFORE WE'RE OFF IN OUR OWN CARS TO POSSIBLY FACE THE SAME FATE.

WE MAKE EXCUSES....PERHAPS WE RECALL THE TIME WE OURSELVES WERE BEHIND THE WHEEL AND SHOULDN'T HAVE BEEN. WE THINK HOW EASILY IT COULD HAVE HAPPENED TO US, BUT WE WERE LUCKY. SO WE LOOK THE OTHER WAY, THINKING.." THERE BUT FOR THE GRACE OF GOD GO I".

WE DON'T WANT TO EMBARASS OUR NEIGHBORS WITH THE STIGMA.... THE LABEL OF ALCOHOLIC...WHICH IS SOCIALLY UNACCEPTABLE. I BELIEVE THERE IS NO STIGMA ASSOCIATED WITH BEING A DRUNK DRIVER IN THIS COUNTRY TODAY! RATHER, I THINK IT HAS THE BLESSING AND PROTECTION OF THE LARGE MAJORITY OF OUR CITIZENS. THE VERY SAME CITIZENS WHO WOULD NO MORE STAND FOR 70 PLANE FATALITIES A DAY THAN THEY WOULD FOR AN EPIDEMIC THAT KILLED 26,000 PEOPLE A YEAR.... WHICH IS WHAT DRUNK DRIVING DOES. WE DO NOT TOLERATE PLANE CRASHES OR KILLER EPIDEMICS, BUT WE LOOK THE OTHER WAY WHEN IT COMES TO GETTING THE DRUNKEN DRIVER OFF OUR HIGHWAYS.

YES, I KNOW IT'S A COMPLEX PROBLEM. IF THREE PEOPLE SIT DOWN TOGETHER TO DISCUSS THE ISSUE, YOU HAVE ONE PERSON TALKING ABOUT HIGHWAY SAFETY; ANOTHER ADDRESSING THE SUBJECTS OF POLICE AND THE COURTS AND ENFORCEMENT: AND THE THIRD WILL BE TALKING ABOUT DRUGS AND ADDICTION AND ALCOHOLISM AND HEALTH. BUT COMPLEXITY IS NO EXCUSE FOR INACTION. IT DOES NOT EXPLAIN OR JUSTIFY OUR DISINTEREST AND AVOIDANCE OF THE PROBLEM.

THIS IS WHY I WAS ESPECIALLY PLEASED TO SEE PRESIDENT REAGAN SIGN THE EXECUTIVE ORDER THAT CREATED THE PRESIDENTIAL COMMISSION ON DRUNK DRIVING A FEW MONTHS AGO. IT IS MY HOPE THAT THIS ACT WILL TRIGGER RESPONSES IN EVERY LEVEL OF OUR SOCIETY. I WOULD LIKE TO SEE MY COLLEAGUES FORM AN ANTI-DRUNK DRIVING CAUCUS HERE IN CONGRESS, AND I ENCOURAGE THE STATES TO DO THE SAME. IN MY HOME STATE OF INDIANA, OUR GOVENOR ANNOUNCED THE CREATION OF A DRUNK DRIVING COMMISSION LAST WEEK. I THINK THAT EVERY STATE NEEDS TO LOOK CLOSELY AT WHAT IT IS DOING TO ADDRESS THE PROBLEM... JUST AS EVERY AMERICAN CITIZEN NEEDS TO LOOK CAREFULLY AT THE ROLE THEY PLAY IN PERPETUATING THIS MENACE.

I AM LOOKING FORWARD TO HEARING THE TESTIMONY OF OUR DISTINGUISHED WITNESS, MR. JOHN VOLPE, WHO HAS BEEN NAMED AS THE CHAIRMAN OF THE PRESIDENTIAL COMMISSION. I ALSO WANT TO COMMEND MY COLLEAGUE, SENATOR HUMPHREY, FOR HIS CONTINUED LEADERSHIP ROLE IN BRINGING THIS PROBLEM TO NATIONAL ATTENTION, AND TO SENATOR PELL, WHO HAS UNCEASINGLY GIVEN HIS TIME TO COMBAT THE PROBLEM. I ANTICIPATE THAT ALL OF OUR EFFORTS WILL RESULT IN THE REDUCTION OF INJURIES AND THE SAVING OF LIVES, AND THE SOONER WE BEGIN THE BETTER.

Senator HUMPHREY. Governor, I am delighted to hear that your Commission has gotten off to a good start. I am certain in my own mind that, in large measure, that is the result of your own enthusiasm and vigor. And I would say the President chose well when he appointed you to that Commission.

How did this Commission come about, to begin with?

Mr. VOLPE. May I just make one comment with regard to some of Mr. Quayle's comments, which were very well done?

Senator HUMPHREY. Of course.

Mr. VOLPE. If I did not know better, I would think that you had looked at a speech I gave in Oklahoma City, one I gave in Boston, and one I gave in Chicago, because I used that crash here in Washington in January. I will not name the airline. I indicated that had I come up to the Congress here and said to a committee that every day for the next 365 days there was going to be one more of those crashes so that you would kill about 25,000 people a year, maybe the Congress might say, "Maybe we ought to appropriate $500 million to try to stop that; we cannot have that."

Yet, as you very well indicated, Senator, it happens every day of the year, except that instead of 70 in 1 crash, there is only 1, 2, or 3 at a time, and so it catches small, hometown newspapers. It is not big news, but you add it up and there are still 70 people whose lives have been snuffed out, and in many cases innocent children—1,500 below 5 years old. So, I agree with you wholeheartedly. I do not think you have seen one of my speeches, but it sounded very much like what I had to say.

You asked a question, Mr. Chairman. Excuse me for making the comment, but I could not help but think about it as the Senator made his comments. You asked about how our Oklahoma hearing went?

Senator HUMPHREY. No. I asked how this Presidential Commission came about in the first place.

Mr. VOLPE. Excuse me. There were some thoughts on the part of the President himself early on. However, with the support of these private groups that you talked about—MADD, RID and many others—along with the support of many members of the House and Senate who urged the President to form such a commission, the President decided that, yes, it was time to do this and proceeded to form the Commission.

Senator HUMPHREY. Is this an ongoing, open-ended organization?

Mr. VOLPE. No. The Commission is given a 1-year sentence to do its job.

Senator HUMPHREY. Sentence?

Mr. VOLPE. Hopefully, the program will not stop then, because I have been through this before as Secretary of Transportation, so I know what it means to try to have a continuing program.

Senator HUMPHREY. Yes, that is one of the problems, of course. As soon as we let down our guard, it all creeps back.

Mr. VOLPE. Absolutely right.

Senator HUMPHREY. You mentioned early in your statement that you thought this was an especially opportune time—that perhaps is not the word you used, but the meaning conveyed—to address the problems of drinking and driving and, likewise, misuse of drugs

and driving. Why do you feel that is so? Why is this particularly an opportune time?

Mr. VOLPE. There are probably two or three reasons for it. I think probably the most important reason for it is that the victims and relatives of victims are coming forward today, which they were not doing until only the last couple of years. They are MADD—mothers against drunk drivers—and they are literally mad to have a 5-month-old baby, for instance, being taken by the president of the Maryland MADD group to a supermarket and have her for the rest of her life—and I was in Maryland with the mother and the child, who is now about 5 years old and will be in a wheelchair for the rest of her life.

Now, those people are coming forward and they are making their voices heard, and I think that that has caught a public awareness and media awareness. That is why I say I think the climate is certainly better today and right to really get a job done.

Senator HUMPHREY. That is good. One of the problems in any government enterprise at any level is the financing of that effort. I note in your testimony that financial self-sufficiency is employed. For the benefit of State and local governments who might be considering such a program, to what extent can these programs be self-financed through fines, for instance?

Mr. VOLPE. I do not believe that they can be financed entirely through fines, fees, paying for their training programs that they go through, or whatever is done. But in New York State, for instance, Senator Smith is on our Commission and is chairman of the committee in New York, and they have established a situation where fines are collected and then returned to the county or the municipality to help pay for the additional police, the additional judicial costs, and so forth.

Senator HUMPHREY. Yes.

Mr. VOLPE. But I think the Federal Government probably will have to take a leadership role, but not only morally. I think that probably they will also have to appropriate funds. I understand that on the House side, they appropriated $23 million, or at least a committee did, about 10 days ago.

Senator HUMPHREY. You mentioned a moment ago that there is increased public concern about this problem and increased public anger over it. What can a citizen do who might read of this hearing and who might read of your testimony? What can an individual citizen do? What are your recommendations? How can he participate in this effort?

Mr. VOLPE. Well, there are all kinds of ways of participating. One way is that in one community, for instance, they have started a program in which citizens are asked to report on people who they believe are drunk drivers in their community.

Now, you know, maybe it is a vigilante system or whatever you want to call it, but this is such a serious problem that I think steps have to be taken that might be somewhat out of the ordinary. The fact that a person is reported as a habitual drunk, who drives, I do not think is spying on anybody. I think you are just placing before the police an actual fact that is taking place; that 9 times out of 10, sooner or later, that man is going to kill somebody.

Senator HUMPHREY. Yes.

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Mr. VOLPE. I think that is one way citizens can react. They can join these various groups that are being formed—the MADD group, the RID group, the Park-It group in New York, and others.

In addition to that—and you will be hearing from him later this morning—in Montgomery County they are doing a great job. In his testimony before us in Oklahoma City, he indicated the possibility of establishing some kind of a permanent group. I said, "Well, are you thinking in terms, possibly, of a tax-exempt foundation of some kind that could be formed that could receive donations from businesses, industries, and so forth, that would be able to continue?"

That is why, as I said earlier, in 1971 and 1972 we had a wonderful experience and I think we did a great deal to help cut down on this drunk driving toll. But, you know, unless the boss man—and I do not care whether you are in the construction business, as I was for many years, or whether you are a Governor or a mayor or a President or a Secretary of Transportation—unless you stay on top of it as almost a No. 1 priority, the thing just automatically does not get quite the pressure that it needs.

So, they hopefully could establish a foundation not only in Montgomery County but in every county of every State in the Nation, where such a foundation could have a president that would not have to serve for 10 years, but serve for a year or two and then pass it on to somebody else. And you would get the renewed blood and vigor that is necessary if you are going to have a program work.

Senator HUMPHREY. Yes. Well, it is heartening to know that there are today available to concerned citizens more local volunteer groups at work than perhaps formerly. Is that not the impression that you have? MADD, SADD, and so on—there are more of these groups around today than ever before.

Mr. VOLPE. No question about it in my mind at all, and this is where the action has really got to take place. This is where the arrests are made; this is where the prosecution takes place. It is at the State and local level that the job is going to be done, with such help as we can provide at the Federal level—guidance, clearinghouse, and giving them information as our Commission proceeds with its work as to those things that have worked well and those things that do not work well, so that they will have an opportunity to put into practice those things that have worked well.

Senator HUMPHREY. I have a number of other questions I hope that there will be time for me to ask. But let me turn to Senator Quayle.

Senator QUAYLE. I wonder, Mr. Volpe, if the President's Commission on Drunk Driving might be getting into the issue of alcoholism itself. We talk about enforcement, we talk about the numbers, we talk about the results. I wonder if you will focus some attention on alcoholism—of course, I am also interested in the drug abuse problem, but in your case it is the alcoholism—and this might be a major focus of the Commission on what to do about the alcoholism.

I notice in your testimony you say the real problem lies with the relatively small portion of heavy drinkers—about 7 percent of the driving population. But if we are really looking at the cause of this, alcoholism is certainly a major contributing factor, and I do not

know what kind of perspective and emphasis you might be giving to the actual cause of the drunk driving.

Mr. VOLPE. There is no question; we cannot look at this subject only insofar as alcoholism by drunk drivers or in isolation. The fact is that, for instance, in Oklahoma City we had the chief probation officer of the municipal courts of Oklahoma City testify. They have just done a tremendous job with young people as well as people who are middle aged and what have you with treatment programs.

She gave me this statistic. After going through a treatment program—and there are all kinds of treatment programs which involve curing alcoholism—80 percent of the people that have gone through their treatment program, at the end of 6 months, have not touched a drop of liquor or any form of alcohol. At the end of 1 year, 90 percent of that 80 percent are still on the wagon and appear to be well on the road to have been cured of alcoholism.

So, to that degree, we are looking at not just alcoholism from the point of view of the drunken driver, but curing the person of alcoholism so that he not only does not drive again while drinking, but he just does not drink and cause family problems, cause possibly loss of his job, and so many other factors that enter into that problem.

Senator QUAYLE. I certainly agree, and I think that curing some of these people is imperative before we have to face a situation of death and fatalities. This is a very important and fundamental issue.

Just one other question, Mr. Chairman. Do you have any ideas or thoughts that you could give to us that we might share with some of our local communities and State officials on how we can get the statutes on drunken driving enforced a little better?

I believe that the statutes are there; and, the penalties in many cases are rather severe. But there just seems to be a lack of willingness or perhaps ways to get around the enforcement. I wonder if you might just shed some light on that subject.

Mr. VOLPE. Now, I almost think you have seen one of my speeches. One of the points I make in some of the speeches I have given, and I have given many, is that in many cases it is not so much new laws that are needed, although in many States tighter and stiffer drunk driving laws are needed. But in many cases what is needed more than anything else is the enforcement of the laws that are on the books, which too frequently, either through plea bargaining or something else—a person goes before a court and eventually, somehow or other, he gets a slap on the wrist and a suspended sentence.

The very serious part of that is that he appears again a month later or 3 months later, and as far as the court is concerned it is still a first offense; there is no record of it. Some States are starting to cure that by going into presentencing, being able to see exactly what that person has done before so that if he has plea-bargained his way out of a first offense or a second or third offense, at least the judge that he goes up before knows that and realizes that this is not really a first offense and can treat it and punish him accordingly.

So, I think you are absolutely right. There are some States or jurisdictions where they have a big job to do in enforcing the laws

they have, some of which are fairly good laws if they were enforced.

Senator QUAYLE. Is there any particular thing that we might do to try to——

Mr. VOLPE. Well, this is what our Enforcement and Adjudication Committee is working on, and we are having our first meeting and hearing in Denver, Colo. next week of that committee. Hopefully, out of that committee we will get some definite recommendations as to how they feel. Judge Finesilver is chairman of that committee. We will be able to hopefully get some real recommendations that we can pass along.

Senator QUAYLE. We look forward to receiving those recommendations. Thank you very much, Mr. Chairman.

Senator HUMPHREY. Governor, it seems that you and Senator Quayle have really focused on the heart of this issue—the problem of repeat, heavy drinkers who also drive while drunk. In fact, in your testimony you state that this kind of drinker comprises 7 percent of the driving population, but accounts for two-thirds of all alcohol-related driving fatalities.

You have also mentioned that a number of States have been particularly active in addressing the alcohol and driving problem in general. Have any of them developed programs to focus on this small segment who are responsible for such a disproportionate number of fatalities?

Mr. VOLPE. I cannot say that any State has really tackled it with the vigor that I hope we see on a continuing basis for years to come. That is not to say that we should neglect the other 93 percent, because that social drinker sometimes thinks he is a social drinker. But until we change the attitudes in this country so that drinking and driving are not socially acceptable—in Sweden, for instance, it is just not socially acceptable.

If two couples, for instance, are going to a party or a dinner where there is going to be a lot of drinking, they decide before they get into the car who is going to drive home, and that person does not have one drink or two drinks; he does not drink that night. A, B, C, D—"A" does not drink that first night. At a second party they might go to a month later or 2 weeks later, "B" does not drink; "A," "C" and "D" can drink to their hearts' content if they want to drink.

So, until such time as we change that norm in our country, we just are not going to lick the problem.

Senator HUMPHREY. I am sure you are right; we do have to change attitudes and change values. But at the same time, it seems to me that the most leveraged interim approach would be to go after that 7 percent who are responsible for repeat offenses.

I get the impression from your answers to Senator Quayle's questions that, really, almost all of the time judges and other law enforcement officials are really unaware of a person's past history in this regard; that is, they can get someone before them who has been arrested for drunk driving and they do not really know if this person is a repeat offender or not. Is that the case?

Mr. VOLPE. That is the case, and I am very hopeful as a result of at least some preliminary thinking on my part—not the Commission's part because we have to discuss this and make our recom-

mendations—but at least preliminarily from what I have already heard and seen, it appears to me that more and more States, and hopefully all of the States, will go into a system where the judge that is hearing the case will know the past history of the defendant before him.

Senator HUMPHREY. I think that is a splendid idea. I am sure that would yield excellent results. I can recall, I am sure as we all can, reading local newspaper accounts of a tragic accident involving a drunk driver. And it comes out through a reporter's investigation that this particular driver has had other problems elsewhere. Yet, there was no effort whatever to try to reform him or to take away his license or impose a stiff penalty. The person is just a cocked pistol roaming around on the highways. That is mixing metaphors, I guess.

Mr. VOLPE. Exactly.

Senator HUMPHREY. I hope that your Commission will succeed in encouraging States and localities to come up with a method such as you have just described so that the responsible officials will have the whole picture about these individuals and will not just simply routinely regard it as a first offense.

Your testimony this morning focuses principally on the problem of drinking and driving. Does your Commission have a responsibility in the area of drugged driving?

Mr. VOLPE. No. Our Commission was established on the drunk driving situation. That is not to say that the President and myself are not concerned about drugs.

Senator HUMPHREY. Yes.

Mr. VOLPE. As a matter of fact, when you get the combination of drugs and alcohol, you have really got then a very—well, if is severe in either case, but when you put them together it is even more severe. I would hope that some attention will be given to this situation on drugs, although there is not as much evidence today statistically to make the case that we are making on drunk driving, because we have the statistics and we are not going to try to reinvent the wheel.

Senator HUMPHREY. Yes.

Mr. VOLPE. And I think that is what we need in drugs—statistics that can prove some of the same things I have indicated today on drunk driving.

Senator HUMPHREY. That we do not have the statistics on drugged driving is simply because that is largely a new problem, not necessarily because driving while under the influence of drugs is inherently less dangerous than with alcohol. It is just a more recent problem; we do not have the data base yet, although there certainly is plenty of evidence to indicate that it is equally dangerous.

Mr. VOLPE. You are absolutely right, Mr Chairman.

Senator HUMPHREY. The National Transportation Safety Board recently issued a statement urging the States to raise the legal drinking age to 21 because it believes there is evidence that that would reduce the number of accidents, injuries, and fatalities from drinking and driving. Does the Commission have a position on this Safety Board recommendation?

Mr. VOLPE. The Commission, as a whole, has not discussed this. We are meeting in Arizona in September and we probably will take this matter up. Personally, however, I have had plenty of experience in this field. I have seen my State and other States go from 21 down to 18 when, in Vietnam, youngsters went to war at 18. So, if they can go to war and get killed, why should they not be allowed to buy drinks and drive?

As a result of that, the death rate on drunk driving in that age bracket of 18 to 21 went up, and in some cases considerably. In quite a few States already, they have gone back up to 21, or in my State they have gone to 20. New York went up to 19—steps in the right direction.

Frankly, I personally believe that the statistics are there. I do not see how we could deny that 21 would not be—and you have to select some age, and it seems to me that 21, in my own opinion, would be an age bracket that would be the age to use insofar as being able to buy spirits, beer or wine.

Senator HUMPHREY. Yes. Do you think, then, that the Commission will be taking up that recommendation and considering it?

Mr. VOLPE. I do not think there is much question about that at all.

Senator HUMPHREY. Good. Well, I want to thank you, Governor Volpe, for your testimony this morning and for your service to the country. I think you are doing, obviously, important work, and doing it very, very well. Indeed, your enthusiasm is very contagious and I am sure that at the end of this 1 year, we will see some very marked results stemming from your efforts. Thank you.

Mr. VOLPE. You are very kind, Mr. Chairman. I appreciate your comments.

Senator HUMPHREY. Senator Orrin Hatch is tied up elsewhere. He had hoped to be with us this morning. He has asked me to include a statement in the record, which I will ask to be inserted at the appropriate place in the beginning of the hearing record.

Our second section is a panel comprised of Peggy Mann, the author of "Marihuana and Driving: The Sobering Truth"; Arthur McBay, chief toxicologist, medical examiner's office, Chapel Hill, N.C.; and Roger Maickel, head of the department of pharmacology and toxicology at Purdue University.

Good morning. We are delighted to have you with us today. Why do we not begin with Mrs. Mann? I think we had better, in the interest of allowing other witnesses to have a fair opportunity, ask you to summarize your testimony, if you do not mind. We will put the entire statement in the record. I can tell that you are enthusiastic about the subject because you have submitted 16 pages of testimony. That is real work.

STATEMENT OF PEGGY MANN, AUTHOR, "MARIHUANA AND DRIVING: THE SOBERING TRUTH"; ARTHUR J. McBAY, OFFICE OF THE CHIEF MEDICAL EXAMINER, DEPARTMENT OF PATHOLOGY, UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, N.C.; AND ROGER P. MAICKEL, HEAD, DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY, SCHOOL OF PHARMACY AND PHARMACAL SCIENCES, PURDUE UNIVERSITY, WEST LAFAYETTE, IND.

Mrs. MANN. Mr. Chairman and members of the committee, the dreadful risks that we all incur from alcohol-impaired driving are at least, and at last, being recognized by Americans from the President of the United States on down, and we must all, of course, be very grateful for the creation of the Presidential Commission on Drunk Driving.

But there are other risks almost as grave which are totally underrecognized by the American public, and it is a few of these risks that I would like to talk about today.

I am a writer, and in July 1979, I published the first article ever written for a major magazine on the dangers of driving under the influence of marihuana. This piece, which appeared in the Reader's Digest, is available with my written testimony. I then did a two-part piece on a still greater threat, which was called "Death on the Highway." I did that for the Saturday Evening Post and it was condensed in Families magazine. That also is available with my written testimony, and that article was on the additive and, according to the latest study, the synergistic effect of marihuana plus alcohol. "Synergistic," of course, means one plus one does not only equal two; it equals three or four. One drug potentiates the other.

Then I have just finished a book called "Arrive Alive: How To Keep Drunk and Pot-High Drivers Off the Highway." For all of these, I interviewed many experts. One of them was Dr. Charles Wetli, whom I interviewed 2 weeks ago. He is the deputy chief medical examiner of Dade County, Fla. Incidentally, Dr. Wetli has just completed a survey of 246 quaalude-related deaths over the past 10 years in that one county. One-third of these deaths were caused by traffic accidents.

Dr. Wetli told me, and I have heard this from many sources:

> I think the time when we had alcohol as the predominant factor for vehicular crashes is long past. Today, people are driving under the influence of other drugs which are equally as intoxicating when taken by themselves or in combination with alcohol.

Dr. Wetli continued:

> The Presidential Commission is far behind the times, still in the era of the 1960's, if all they are going to look at is alcohol. Everyone knows that drinking and driving do not mix, and every State has legislation concerning the drunk driver. The Commission must also address itself to the fact that today we have a drug-oriented society. Therefore, it is imperative that the Presidential Commission also concern itself with drugs—legal prescription drugs, over-the-counter drugs, and illegal drugs.

Now, I know that the Commission was mandated only to look into alcohol, but when we consider that most drug takers wash down their drugs with alcohol, I think there is an obvious niche for looking into the drug picture.

In Broward County, Fla., for example, next to Dade County, for several years police have been testing DUI offenders for drugs

through urine testing, and they found about 50 percent of those arrested for DUI have drugs in their urine or blood.

I was interested to read the statement of Dr. McBay, who will testify next. He quotes a study done in Ontario where there were only 14 percent of alcohol-drug-related deaths and in 12 percent only drugs were found. He said, "I have not heard of any studies which indicate a greater number of incidences of more significant quantities."

Well, in Boston there was a study done of 267 fatalities. This was done not by urine testing, which was not available then, but by in-depth interviewing. The researchers interviewed, a half hour interview each, friends of the driver who had been most responsible for causing a fatal accident, his parents, his landlady, and so forth. In cases where the driver was still alive, they interviewed the driver. They found that in 16 percent of the cases the driver had been smoking pot prior to the accident.

In 1978 Victor Reeve, of the California Department of Justice, did a very extensive study in California; 19,000 drivers arrested for DUI opted to give blood rather than give breath or urine samples. (Only blood testing by a sophisticated laboratory technique can provide a valid correlation with marihuana impairment.) A random sampling of 1,792 drivers was made. And it was found that 24 percent who had not been using alcohol were sufficiently marihuana-impaired to have been called over by the police and arrested for DUI. Incidentally, all of those 24 percent who had pot but no alcohol in their blood had failed the roadside dexterity test, whereas not all the drivers who had been using alcohol failed the roadside dexterity test!

So, although, as we know, there is as yet no accurate roadside test for marihuana impairment on the highway, this study is at least indicative of a very real problem.

I would like to talk about the drug marihuana rather than the other drugs which are also driver-impairing because of two statistics. First: in the latest national statistics that we have right now, 1979 figures, 1 out of every 3 Americans aged 18 to 24 were current users of pot. That means they had smoked marihuana during the past month. And the figure may well have gone up since 1979.

The second statistic: National Institute on Drug Abuse surveys show that 60 to 80 percent of pot smokers say that they sometimes drive stoned.

Now, how impairing is marihuana?

The scientist who has done the most work in the United States on marihuana and driving in simulated studies has this to say. By the way, there have been over 50 studies done in the United States on marihuana since 1970 when standardized grades of government-issued marihuana were made available to researchers. And this so-called NIDA marihuana, I may point out, is less potent than that which many pot smoking drivers are using today.

Dr. Herbert Moskowitz, is the scientist who has done more simulated driving studies on marijuana than any other researcher. And it should be noted, too, that in simulated driving studies, most drivers do better than they do on the road.

I quote Moskowitz in my Reader's Digest article as saying, "The preponderance of evidence indicates that marihuana impairs skills

performance and perceptual processes, including vision, attention, and tracking behavior." Thus, he says, "all important components of driving behavior are clearly affected."

Now, I may say that some people quote Dr. Moskowitz' early findings in which he did not make such a strong statement, and I asked him about this and he said, "Well, those were my initial findings. I have certainly changed my mind."

What are some of the impairments? For example, after one joint of marihuana or less, the researchers have found impairment of search and recognition abilities. This was done with a joint with 2 percent THC, and the average "good pot" being sold today is about 3 percent THC. That study showed that the driver can become totally involved with only one facet of driving; for example, music on a car radio. They get hung up on that, or with a private reverie. Therefore, the driver simply might not notice a car which is coming in from a crossroad or a pedestrian who has stepped into the street.

Also, a low dose can result in expansion of the time/speed sense. A driver who is pot-high often thinks he is traveling only 40 miles an hour when, in fact, he is doing 80 or 90. A medical examiner gave me this example: Two boys were on a motorcycle. There was an absolutely clear track between them and a truck far ahead. They zoomed into the truck; both were killed. It was found that both boys had marihuana in their blood and they had not been drinking alcohol. It was obviously an impairment of the time/speed factor. One researcher said it is like operating with a faulty speedometer.

There are other impairments which are significant at what researchers call a high-dose level, which is two street joints. Two joints may sound like a lot. However, think of keg parties, the most popular type of party among high school and college kids today. You pay $1 or $2; for that you drink all the beer you want. Almost always, pot is smoked and the people I have interviewed say that four or five glasses of beer is typical and they smoke the equivalent of 2 to 3 joints. Then they drive home.

The researchers found the following impairments after the subjects smoked two joints. The driver may imagine he is doing a fine job of keeping the car in the correct lane when, in fact, he is weaving in a bizarre manner. Other findings included impairment of peripheral vision signal detection, impairment of central vision signal detection, impairment of time reaction, impairment of night driving abilities, impairment of short-term memory function and information storage, impairment of manipulative and coordination skills.

Now, it might sound rather boring to you to go over this list, but suppose you were facing a driver coming down the road who was impaired with just one of these facets, and usually they are impaired with more than one. Here are more: impaired instantaneous judgment abilities, impaired hand/eye coordination, impaired concentration, impaired reaction time, impaired stability, impaired ocular motor control, impaired vigilance, impaired auditory signal detection, and impaired interpretation.

Realize that when the joint and the alcohol, which can just be one or two beers, are taken together, these impairments are double

trouble, as a minimum, as has been found in other studies by Moskowitz. And a study by Dr. Larry Sutton, showed that 100 percent of the drivers who had been given a low level of alcohol—0.06, which is lower than any State considers liable for prosecution, plus one joint, were pulled over by the traffic officer for DUI. These drivers were in a closed-course driving condition, but if they had been on a road or highway they could all have been arrested for reckless driving.

There was one study done in actual driving conditions, probably there will never be more than one because it was so hard to arrange for. This was done at the University of British Columbia in Canada. Thirty-eight students who were experienced drivers and pot smokers drove from the university through the heavy traffic of the downtown area and back. The students later told Dr. Klonoff that because they were pot smokers, they wanted to prove that their drug did not harm their driving, and they tried very hard.

Indeed, in some cases a few facets of their driving did improve. However, the overall figures were these: The drivers who had smoked one joint had a 42 percent decline in driving skills, and those who had smoked two joints had a 63 percent decline in driving skills.

Now, I would like to close with just two points. I hope that you will pick up my statement because I have a lot more things I wanted to say. One point is that we still have in America today, not among the scientific community, but certainly among the public, those people who feel that marihuana is relatively harmless. Among these is the organization NORML, the National Organization for the Reform of Marihuana Laws, which is out for legalization of marihuana. Even they, and virtually all the propot people that I have heard, say that they agree with the so-called antipot people on one score at least, and that is that it is dangerous to drive under the influence of marihuana.

The second point I would like to make is this: Funding, we all know, is now a dirty word; nobody has any money. However, in this particular facet of research—and I am talking now not only about marihuana but about other drugs as well—funding for initial studies need not be an undue burden on Government agencies or foundations.

For example, the so-to-speak laboratories are already in existence in most communities in driving schools and police academies which have closed-course driving courses. Student volunteers are usually willing to participate as subjects for a minimum fee. Before-and-after tests can be done with no undue amount of trouble. And the results can be clear and convincing.

For example, Dr. Larry Sutton, whose study found that alcohol plus marihuana were synergistic, did his entire study on a budget of under $3,000. If far more research were encouraged in this area, it is not unreasonable to suggest that vital new light could be shed on the dark morass of ignorance which now exists concerning the polydrug user who washes down pills with alcohol and rounds off the mix with a marihuana cigarette.

Thank you.

[The prepared statement and additional material of Mrs. Mann follows.]

HEARINGS BEFORE THE SENATE SUBCOMMITTEE ON ALCOHOLISM AND DRUG ABUSE

PREPARED STATEMENT OF PEGGY MANN

Mr. Chairman and members of the Committee, I am honored to have been asked to testify today, and before I officially begin I would like to thank you as one of the many millions of citizens grateful for the dedicated job your committee is doing in this area which is so crucial to the health and well-being and future of our nation. Of all the important hearings you have held on the effects of marijuana on youth, on the problems of alcohol and drug abuse in the military, on the drug and alcohol research and prevention activities of the Federal Government, etc., perhaps none have been as important to so many Americans as today's hearings on alcohol, drugs, and driving--for the obvious reason that this matter can drastically affect the life--or the death--of any one of us at any time. From a baby who is now a quadreplegic for life, to a straight-laced Octogenarian grandmother being driven to church on a Sunday morning. And who finally got there--in a coffin. We are all at risk. All of us who use the roadways.

The dreadful risks we all incur from the alcohol-impaired driver are at least--and at last--being recognized by Americans from the President of the United States on down. And we must all be grateful for the creation of the Presidential Commission on Drunk Driving.

But there are other risks, almost as grave, which are totally underrecognized. And it is those risks I would like to talk about today.

I am a writer, and in July, 1979 I published the first article ever written for a major magazine on the dangers of driving under the influence of marijuana. The piece which appeared in the Reader's Digest was called "Marijuana and Driving, the Sobering Truth." (It is available with my written testimony.)

That article showed how marijuana is just as impairing to driving skills as is alcohol; though it can be impairing in different ways.. Over 50 studies have been done in the U.S. on marijuana since 1970 when standardized grades of "government issued" marijuana was made available to the researchers. And it should be noted that this marijuana, with 2% THC, is less potent than that being smoked by many pot-high drivers on the road today.

Dr. Herbert Moskowitz has probably done more simulated driving studies on marijuana than any other U.S. researcher. It should also be noted that most drivers do better under simulated driving conditions than in actual driving conditions. I quote Moskowitz in my Digest article as saying: "The preponderance of evidence indicates that marijuana impairs skills performance and perceptual processes, including vision, attention, and tracking behavior--all important components of driving performance."

Some of these components are impaired after only a low dose of marijuana, for example, impairment of "search and recognition" abilities. Even after one joint with one-half percent THC, the driver may become totally involved with only one facet of driving, or with music from the car radio, or with a private revery. Therefore, he or she might simply "not notice" a car exiting from a crossroad, or a pedestrian who has stepped into the street.

A low dose can also result in expansion of the time-speed sense. The driver intoxicated with marijuana often thinks he is traveling only 40 miles an hour, when in fact he is doing 80 or 90.

Other impairments, such as tracking performance, were "significant" at high dose levels (the equivalent of two "street joints"). The driver may imagine he is doing a fine job of keeping the car in the correct lane, when in fact he is weaving in a bizarre manner.

Other findings included:

- impairment of peripheral vision signal detection;
- impairment of central vision signal detection;
- impairment of time reaction;

- impairment of night driving abilities;
- impairment of short-term memory function and information storage;
- impairment of manipulative and coordination skills;
- impaired instantaneous judgment abilities;
- impaired hand-eye coordination;
- impaired concentration;
- impaired reaction time;
- impaired stability;
- impaired ocular motor control;
- impaired vigilance;
- impaired auditory signal detection; and
- impaired interpretation.

The only marijuana driving test ever carried out in actual driving conditions was done by Dr. Harry Klonoff, professor of psychiatry at the University of British Columbia. Thirty-eight students who were habitual pot smokers covered a route from the university campus through the traffic-heavy downtown area and back. All of the students were psychologically stable. They were experienced drivers, and pot smokers. And several of them later confessed to Dr. Klonoff that they were determined to prove that pot didn't affect their driving adversely so they'd--tried harder. Perhaps because of this factor, in a few facets their driving did improve. However, the overall figures were startling. The students were rated according to the system used by British Columbia Department of Motor Vehicles in examining drivers for licensing. The drivers were in dual control cars, and each driver was accompanied by an observer who took careful notes.

These were the overall scores. The drivers who had smoked one joint had a 42% decline in driving skills. Those who had smoked two joints had a 63% decline in driving skills.

For those of us who like to shrug this off with the cop-out, "Well, who smokes two joints before driving?" let me say that I have interviewed countless young people coast to coast, and I was told over and over that at a typical keg party kids drink four or five beers or more and smoke the equivilant of two to three joints. Then they drive home. And, as you know, keg parties are the most popular type of parties for young people in the U.S. today.)

For more official data, I present these two sets of statistics:

In 1979 when my Digest article was published, according to the National Survey on Drug Abuse from ages 12 on up, among Americans ages 18 to 24, one in three was a current pot smoker--had smoked pot within the past 30 days. One in three. Those 1979 figures are still the latest national statistics we have available for ages 12 on up. But from all we hear about pot use today in the armed forces, in the workplace, in colleges, etc., etc., the figures for adult use have gone up since '79.

The other sobering statistic: according to National Institute on Drug Abuse surveys, 60 to 80% of pot smokers say that they sometimes drive high--marijuana intoxicated.

Now--to take the subject one step further. Back in 1974 when Dr. Klonoff did his study in actual driving conditions, he learned that 64% often used alcohol in combination with pot before driving. Since then, this trend has risen sharply in Canada and the United States.

The only American study ever done on the effects of driving in a closed course under the influence of alcohol and marijuana was completed in 1981 by Dr. Larry Sutton, of the Institute for Driver Research and Substance Abuse. There were nine subjects; each drove on four different evenings, under four different "conditions."

They were all experienced pot smokers and alcohol drinkers, and each drove on four successive afternoons, under four different "conditions":

1. pot (one joint) plus alcohol;
2. placebo alcohol plus one joint;
3. placebo joint plus alcohol; and
4. placebo alcohol plus placebo joint.

During the 36 driving trials, patrolman Donald Dolfi followed the subjects in his own car, noting their performance, which included executing common procedures for a driver's license examination in Pennsylvania. He "pulled over" those drivers he would have suspected of "DUI" (driving under the influence)-if they had been on the road.

When the test was completed Dolfi said to Sutton, "I guess I spoiled your study. I only pulled over drivers 15 times."

But when the "double blind" code was revealed and Sutton looked at the figures, a chill when through him. Of the 15 incidents in which Dolfi "pulled over" drivers, three students were under the "marijuana only" condition, two were under the "alcohol only" condition, and one bad driver was under the double placebo. But all nine of the rest--100%--were under the alcohol plus marijuana condition.

The results of Sutton's study indicate that the impairments caused by pot plus alcohol are more than additive, as has been shown in other studies. The effects may be synergistic. One plus one equals three or four on the impairment scale.

A further sobering fact is that if they had been on the highway, none of these drivers could have been prosecuted for DUI since they had such a low blood-alcohol-concentration level (.06 BAC) and since there is, as yet, no viable roadside test for the pot-high driver. All 15 "pulled over" for DUI by Dolfi would therefore, have been "home free"--unless, of course, they had injured or killed themselves or others.

I did a two-part article called "Death on the 'High' Ways." This appeared in the September and October issue of the Saturday Evening Post last year. It was reprinted in a condensed version in Famlies magazine in January, 1982, and this piece is also available with my testimony. In researching these articles on the driver-impairing effects of marijuana plus alcohol, I came across a new plateau of sobering facts on the subject.

It is horrendously evident that the public-at-large is unaware of the impairing effects of driving under the influence of marijuana. Furthermore, many pot smokers actually believe they drive better stoned. Here are quotes from four of the many professionals I interviewed on this subject:

. Ed Moses is a former undercover agent who now works full time with chronic pot-smoking teenagers throughout Missouri. "Hundreds of kids have given me this message," he said. "They tell me, 'I like what my drug does to me when I'm driving.' or, 'I get more into my driving when I'm stoned'--like they get more into their music. Some of them tell me that because their perceptions and reactions are distorted, they find it challenging to drive under the influence of marijuana."

. From Hugh Alcott, Project Manager of the California Department of Corrections' Special Narcotics Section, who deals with some 5,000 drug abusing adults a year: "A lot of people who've had too much to drink and know their driving will be affected smoke a joint 'so they can drive better.' They actually believe that marijuana acts as an antidote to the effects of alcohol. All the pot does, of course, is to make them feel they're driving better. In fact, their driving is far more impaired than if they'd used alcohol alone."

. From Kevin McEneaney of Phoenix House in New York City, the nation's largest residential drug treatment facility, "There's a psychological pot phenomenon we term Behavioral Toxicity--a holdover of stoned magical thinking into the sober state. If a driver thinks he's driving better than ever when he lights up a joint on the highway, this total misconception often sticks with him

when he's sober. Therefore, the next time he gets behind the wheel he lights up a joint so that he will, in his view, 'drive better.'"

. From Bruce Bomier, Executive Director of the Minnesota Institute which administers the excellent state-wide educational program for those arrested for marijuana possession: "Over 25 per cent of the people we've interviewed thought that marijuana would improve their hand-motor coordination. About the same number thought it had no effect at all on their driving."

Obviously, the public perceptions and misconceptions about driving under the influence of pot cries out for a massive public relations campaign to let people know the sobering results of the studies.

So far as hard data concerning marijuana and death and accident statistics are concerned, we are in a legal and scientific limbo. Since pot is fat soluble and the metabolites of a single joint remain in the body for weeks, we as yet have no way of pinpointing when a driver smoked his or her joint, and whether or not the driver was actually stoned when the accident occured. This makes it even more imperative that we employ the only safety route wide open to us at this time: a country-wide educational campaign on the hazards of driving high.

And the need for taking this route is, in a strange way, compounded by the fact that--finally--attention is being paid on a national scale to the matter of the drunk driver. Cpl. Ed Moses of the Missouri State Highway Patrol put it this way--and I heard the same message from countless police officers I interviewed for my new book: Arrive Alive: How to Keep Drunk and Pot-High Drivers Off the Highway.

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Ed Moses told me: "The young people of driving age are now getting the message quite loudly about driving and alcohol. However, since little or nothing is being said by the Federal Government or anyone else about the hazards of driving under the influence of marijuana, the message is getting across to young drivers that it must be okay to drive stoned. If this wasn't so, the government would be saying something about it. They take the void of nothing being said to mean that they can get behind the wheel after smoking pot--or while smoking pot. It's obviously no big deal, and it won't cause a problem."

When we consider the huge amounts of money which have been spent--and mis-spent--by the Federal Government to get across the idea that alcohol and driving don't mix, and when we consider that, in the words of one Highway Patrol officer, "marijuana-high drivers are putting us on a collision course," and when we consider that the Federal Government has done little or nothing to get across to the public the substantial amount of information we have about the dangers of driving under the influence of marijuana, the shrieking conclusion must be: it's time that something is done in this area. High time--if you'll excuse the term.

Now, let's climb up to still another plateau of concern, another area which is not only under-recognized by the public, but totally under-researched as well.

In gathering information for my book Arrive Alive, I interviewed many medical examiners. They were all deeply concerned about the following factor. I quote one of them: Dr. Charles V. Wetli, Deputy Chief Medical Examiner, Dade County, Florida. (Dr. Wetli, incidently, has just completed a survey of 246 Quaalude-related deaths, one-third of which were caused by traffic accidents.) He told me: "I think the time when we had alcohol as the predominent factor for vehicular crashes is long past. Today people are driving

under the influence of other drugs which are equally as intoxicating when taken by themselves or in combination with alcohol. If the purpose of government is to protect the public interest, then we have to have adequate research studies so we can first of all clearly identify what effect each of the drugs has on driving, by itself, or in combination with alcohol, or other drugs. For example, the following is not unusual. A woman goes to a party. She's already under the influence of Valium--prescribed by her doctor. At the party she has a few cocktails smokes or shares a marijuana cigarette, pops a pill--a Quaalude--and then drives home. If she gets into a car crash, we might find a low level of alcohol, perhaps .05 BAC, which is far below the presumptive legal level of intoxication. The Quaalude blood level may be within the low therapeutic range for this legal drug. Then you throw into that a low level of Valium--what the doctor ordered. And we don't even test for marijuana because at our present level of testing ability it's not practical since we couldn't tell when the joint had been smoked. So we're left with low drug and alcohol level. But when you add this mix together it takes on more significance. However, we lack adequate research in this area and we have difficulty in interpreting what the result actually means.

"The Presidential Commission is far behind the times--still in the era of the 1960's--if all they're going to look at is alcohol. Everyone knows that drinking and driving don't mix. And every state has legislation concerning the drunk driver. The Commission must also address itself to the fact that today we have a drug-oriented society. Therefore, it is imperative that the Presidential Commission also concern itself with drugs--legal presoription drugs, over-the-counter drugs, and illegal drugs.

"In Broward County, Florida, for several years, police have been testing DUI offenders for drugs, through urine testing. About 50% of those arrested for DUI have drugs in their urine or blood.

"This is one way to go. However, to be on sound ground so that justice is not thwarted on the one hand, and that innocent people are not convicted on the other hand, and that the public should be aware of the hazards on the third hand, we need to know much more than we do about the interaction of drugs while operating a motor vehicle.

"Alcohol has an additive effect on some drugs, such as marijuana, and a synergistic effect on other drugs. Also, drugs in combination have similar potentiating effects. But very few of these additive or synergistic effects have been studied in relation to driving.

"Also relatively unstudied is: how do we evaluate tolerance for each of these drugs? For example, a woman who takes Valium on a daily basis develops tolerence and may be able to drive very well. Whereas, a new user may be quite incapable of handling an automobile after one tablet. And Valium, of course, is still among our best-sellers in the legal drug category."

Researchers in this area point out that funding need not be an undue burden on government agencies or foundations, all of which seem to be strapped for funds these days. The so-to-speak laboratories are already in existence in most communities: driving schools etc., which have closed course driving courses. Student volunteers are usually willing to participate as subjects for a minimum fee. Before-and-after tests can be done with no undue amount of trouble. And the results can be clear and convincing. For example, Dr. Larry Sutton did his important study on marijuana and alcohol on a budget of $2,600.

If far more research were encouraged in this area, it is not unreasonable to suggest that vital new light could be shed on the dark morass of ignorance which now exists concerning the polydrug user who washes down pills with alcohol and rounds off the mix with a marijuana cigarette.

Now that we've touched on this dirty word--funding--I would like to conclude with a few other points on this subject.

The book that I mentioned, Arrive Alive: How to Keep Drunk and Pot-High Drivers Off the Highway, has a great deal in it about the remarkable effectiveness of citizen activitist groups who, thus far, have operated almost exclusively in the drunk-driving area.

The glowing stories of their important achievements abound. In many states, these citizen activist have gotten vital new drunk driving legislation passed, legislation which has previously foundered and failed in passage. However, in my research I have also come across individuals and groups which have foundered and failed for one reason only. They were totally unfunded and simply could not afford to continue.

It's very romantic to talk about volunteerism. But who are most of these volunteers? They are taking money out of their own household budgets to pay for Xeroxing, to pay for long distance phone calls, to pay for meeting halls, to pay for gas and travel expenses when they speak at schools, etc. Some of these volunteers are impelled by an urgency too deep to be derailed for any reason; those who have lost a loved one in a car crash.

But about half the citizen activitists in this movement are people of good will who feel that attention must finally be paid; that something must finally be done. And it is largely among these people--vitally needed as they are--that the dropout factor occurs.

And when you look at what these citizen activists can accomplish on a miniscule budget, compared to what some consultants and professionals have achieved on massive budgets, the results are mind-blowing. For example, on August 13, 1973, Congress appropriated $11,000,000 out of the Highway Trust Fund to fund five separate studies for a "Highway Safety Educational Programming and Study Report." One million dollars of this $11 million was allocated for a study of the use of mass media for informing and educating the public on ways and means for reducing the number and severity of highway accidents. This resulted in a 42-page document including 10 pages of "selected sources". The introduction to this document states; "The use of mass media is as technically complex as any of the highway safety disciplines.". . . This is a totally untrue statement. There is nothing "complex" about the use of mass media. All that is required is the time, talent, knowledge, dedication and a sense of responsibility on the part of one or two experienced writers.

Furthermore, [redacted] the Department of Transportation's million dollar document on the use of mass media considers only the effectiveness and cost effectiveness of radio, print ads, pamphlets, television, posters, bus cards, films/ speakers bureau scripts. The authors have thus only looked at the extremely expensive avenues of approaching the public. This is not to say that these avenues should not be used. Every avenue must be used. But in this DOT document entitled, "The Use of Mass Media for Highway Safety," the use of mass media magazines, newspaper syndicates and Sunday supplements is not even mentioned once!

What happened to this $11,000,000 report?

It is at present gathering dust on the shelves of the Highway Safety Research Institute in Michigan, which has the world's most complete collection of documents on the subject of Highway Safety. This library is headed by a lady appropriately named Miss Grimm. It contains 51,000 technical reports, scientific studies, etc., on highway safety.

Fifty-one thousand. Coincidentally, the same number as Americans killed on the U.S. roads in 1979 and again in 1980.

Was it the authors of these 51,000 documents who finally effected a turn-around in our nation's awareness of the drunk driver? Or was it the citizen activist groups?

Last year the National Highway Traffic Safety Administration allocated one-time-only grants to the two national citizen activist organizations MADD (Mothers Against Drunk Drivers) and RID (Remove Intoxicated Drivers). The two groups received a total of $160,000. For one year.

For this money RID got vitally important new bills passed in New York, Tennessee, and Missouri; legislation which had died in previous sessions before RID got into the act. With this money RID also enlarged their chapters from 14 to 60 throughout the nation.

MADD achieved equally impressive results, including raising the consciousness of the nation to the problem of drunk driving.

But these grants are ending this year--and there is no money to replace them. Nor is there money to support other citizen activist groups.

Why not have a trust fund like the National Highway Trust Fund, set up, perhaps under NHTSA, to help support the efforts of citizen activist highway safety groups with a proven track record? If states taxed every alcoholic drink a nickle a drink there would be ample money to cover the expenses of all these groups, plus all other aspects of the problem--including victim rehabilitation and treatment for alcohol and drug-impaired drivers.

This means of funding would mean that the people who are chiefly causing the problem would be paying for the solutions.

One very effective citizen activist, Charlotte Kitowski, of Hartford, Connecticut, headed a group called Citizen Government Transportation Center. With a $30,000 a year budget they had a statewide impact. Charlotte pointed out: "Many a professional consultant would be unwilling to do a year-long project for that low a figure."

Charlotte now heads Transportation Alternatives, Inc. in Hartford. She started a local program of speakers going into schools to talk to kids about drunk driving. A very effective program. But it had to stop just as it got going because there was no funding. As Charlotte put it: "My husband and I simply couldn't afford to support this project any longer out of our own pockets."

There are thousands of dedicated people throughout America who have a great deal to offer, but who cannot afford to continue. Even reimbursing them for their expenses would encourage many of them to go on.

I would like to close with four good reasons why citizen activist groups should be funded as our nation's most important troops in the all-out war we must finally wage against the drunk and drug-impaired driver.

1.) They're used to working with small budgets, so they get more mileage out of every dollar invested in them by using the help of volunteers and by being very concerned about cost effectiveness. For example, one group produced a glossery of transportation language to make it easier for citizen activists to become involved in transportation planning. This glossary is now used all over the country. A consultant firm told the group their fee for creating the book would be $60,000. The citizens group did the job, including publishing the book, for $5,000.

2.) Citizens tend to be more creative with the use of funds because they know their local communities better than the high-priced consultants and insulated bureaucrats.

3.) In many places the citizen activitists are the sole experts on drunk and drug-impaired driving. The alcohol professionals tend to deal only with how drinking affects you in general. The transportation people generally talk only about highway safety aspects. Each agency operates in its own circumscribed perameters or limitations. For example, there are few, if any, government agencies which can provide experts to speak in local schools on drunk and drug-impaired driving. But citizen groups have proved that they can become experts, and can reach students in a way they've never been reached before.

4.) Citizen groups can be very helpful in assuring that government funds on drunk-driving are effectively used. One small example: A state agency used supermarkets to display their drunk-driving flyers. A citizen activist monitered the display for over three hours. Not one person stopped to pick up the material. This was not surprising since 90% of drunk drivers are male and 90 percent of supermarket shoppers are female. Said the activist: "If you're going to try to affect behaviorial change you can do better having a human being speaking to other human beings, and <u>then</u> giving out the literature."

In many instances, heftily-funded government programs are not <u>allowed</u> to take the action which is required to get the job done. Doris Aiken, President of RID-USA, cites this example: "From 1971 to 1974, eighty-eight million dollars was poured into ASAP--Alcohol Safety Action Projects--under the Federal Agency, NHTSA. Among other things, ASAP studied how to control drunk driving. And they did find out how to control it. They were out in the community. They worked very hard. They spread all over the U.S. But they didn't make a dent. Indeed, traffic fatalities and injuries rose every year due to drunk driving. Why were they ineffective? Because ASAP was funded as a research program. Much of the underpinnings of the problem in

local communities is political. And ASAP was not funded to help dethrone a weak judge or to lobby for legislation. It is citizen activist groups who can-- and who are -- getting this essential part of the job done."

To sum up: according to a 420-page report sponsored by the Insurance Institute for Highway Safety:

> Only cancer outranks motor vehicle crash deaths and injuries in dollar costs to the nation. In terms of 1980 dollars, the killing and injuring of people on the highways can be conservatively estimated as annually costing the U.S. some 20 billion in wasteful, unproductive, expenditures, including $6.7 billion in medical, rehabilitation and other direct outlays, and $13.5 billion in lost productivity.

In view of this 20 billion dollar figure of dollar losses to the nation each year due to traffic accidents, it would certainly seem cost-effective--to say the least--if the Government saw to it that funding was available for the two most crucially-needed facets in our campaign against the drunk and drug-impaired driver:

1.) new research on the driver-impairing use of drugs, and the use of drugs plus alcohol, and a concerted new effort to communicate the results of this research to the American people; and

2.) to give on-going funding to citizen activist groups with a proven track record.

An evaluation study of their results might be required at the end of a two-year period, to measure the effectiveness of their program. Since these groups have already done so very much with so very little, we can all take hope at what they might accomplish if they had a little bit more!

MAGAZINE AND NEWSPAPER-SYNDICATE ARTICLES ON HEALTH HAZARDS OF MARIJUANA AND ON "KIDS AND DRUGS" BY PEGGY MANN

Magazines

Reader's Digest:

"Marijuana and Driving: The Sobering Truth," May, 1979. (This was the first piece to appear in any major national magazine which alerted road users to the very specific dangers of driving while marijuana intoxicated.

"Marijuana Alert: Brain and Sex Damage, December, 1979. (This article received more requests for reprints in a shorter space of time than any article in Digest history.

"Marijuana Alert II: More of the Grim Story."

The Reader's Digest has a basic U.S. circulation of 18,000,000. In addition, each of these articles was offered for reprint for a minimal charge (Paid to the Digest Reprint Department).

By March, 1981, reprint orders for:

"Marijuana Alert: Brain and Sex Damage": 3,306,350

"Marijuana Alert II": 585,169

"Marijuana and Driving": 202,578

In addition to this, the orders, thus far for "Marijuana Update (a combination of all three articles) are over 50 ,000.

In addition, all of these articles were widely used in the Digest's overseas editions.

Ladies Home Journal; circulation: 5,500,000

"Do You Know Where Your Children Are? (And What They're Into?)", Oct. 1979.

"The Battle Against Pot", Oct., 1980.

Family Circle: circulation: 7,200,000

"The Case Against Marijuana: New Medical Findings," February 20, 1979 issue.

"Kids and Drugs: New Facts, New Fears, New Hope," March, 1981.

Family Weekly: (a Sunday Newspaper supplement) circulation: 12,371,182

"Frightening Facts About Children and Drugs," Nov. 29, 1979.

Saturday Evening Post: circulation 600,000

"Marijuana: The Myth of Harmlessness Goes Up In Smoke." A two-part piece: July/August 1980 issues. In addition these pieces were published as a booklet by the Medical Education and Research Foundation, and over 60,000 copies have, thus far, been sold and distributed free of charge by the Foundation.

Newspaper Syndicates

Washington Post:

"The Case Against Marijuana Smoking," July 30, 1978. (This coverage of the Reims Conference was the first important article to appear in recent years on the health hazards of marijuana.)

"The Parent War Against Pot," January 6, 1980.

Both long pieces (over a full newspaper page) were published in the "Outlook Section" of the Sunday edition of the Post and were widely used by other major newspapers throughout the United States.

King Features Syndicate:

Peggy's 6-part series isnow being offered for use in major newspapers throughout the U.S. in May, 1981.

Peggy has also written on the subject of the health hazards of marijuana for specialized magazines:

Listen (three articles)
Scouting (two articles)
PTA Today (three articles).

She suggested the theme of marijuana as one complete issue. The editor accepted it, and Peggy was helpful in recruiting writers and specialists for this non-paying publication. (May, 1981 issue.)

Peggy has granted free reprint rights(to all of her articles she has the rights to) to all organizations and newspapers requesting this.

There are no figures available for the newspaper use.

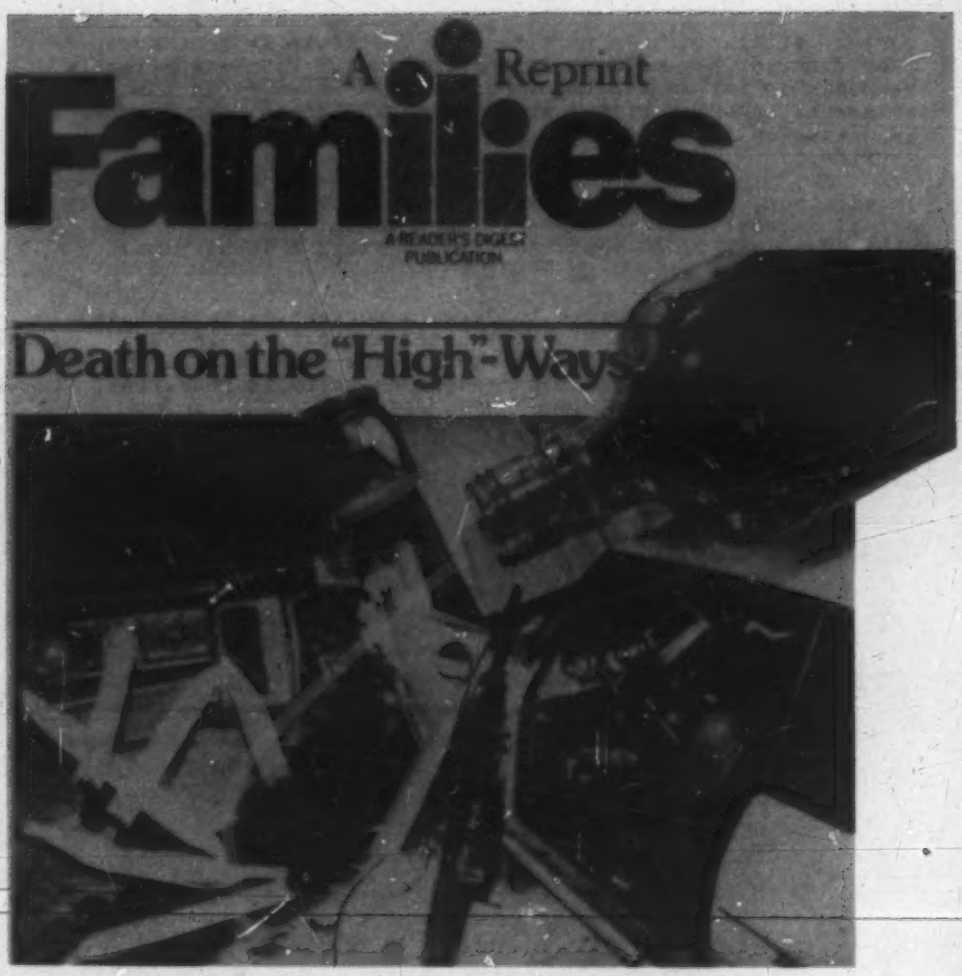
As a conservative estimate, Peggy's magazine articles on the health hazards of marijuana have reached 75,000,000 readers in the U.S. alone.

Furthermore, Peggy's articles have had a galvanizing influence on other media -- particularly in the television area. (For example, her article in the Washington Post was directly responsible for an important "Today Show" segment on the parent movement. Another of her articles -- in Ladies Home Journal -- led directly to a week-long segment-series on "Good Morning America.")

In addition, many parents have written to Peggy saying that one of her articles 1) awakened them as to "what was wrong" with their child; 2) inspired them to start a local parent group.

Some of the editors agreed to Peggy's suggestion to include a "Where to Write" box along with her article. This has, of course, proved very helpful to all the organizations mentioned, as well as directing readers to reliable resources.

A Reprint
Families
A READER'S DIGEST PUBLICATION



Driving on Drink and Pot

When you mix liquor and marijuana—and then take the wheel—you compound a lethal peril

Condensed from
THE SATURDAY EVENING POST
PEGGY MANN

THE EVIDENCE is clear that alcohol and driving do not mix. Every year, more than 50,000 people are killed on the nation's roads, and almost two million are seriously injured. According to the National Highway Traffic Safety Administration, "About half of the traffic deaths are related to alcohol abuse."

Eighty percent of fatal accidents are first accidents. This figure underscores one of the most tragic parts of today's grim picture: those at greatest risk are the youth of our nation.

In 1980, the U.S. Surgeon General revealed that although the overall death rate for every other age group dropped in the period between 1960 and 1978, the death rate for 15- to 24-year-olds rose. And the Insurance Institute for Highway Safety reports that nearly half of all teen-age deaths are due to motor-vehicle accidents.

The most common explanation offered by researchers for the consistently high accident involvement of young drivers is the inexperience of this group with driving, and with

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drinking and driving. But it is now clear that death on the road has received a considerable transfusion of tragedy via a wave of marijuana users.

America's young people form a generation in which large numbers smoke marijuana. The magnitude of the involvement is shown by the fact that in 1962 only four percent of Americans ages 18 to 25 had ever used marijuana, while by 1979, 35 percent reported "current use" (within the past month). Furthermore, the marijuana available today is stronger than it was ten years ago, when the average Delta-9 THC potency was only about one-half percent. (THC is the chief mind-altering chemical in the drug.) Today, the THC potency of "street pot" is 4.5 percent.

Surveys reveal that "60 to 80 percent of the marijuana users questioned indicated that they sometimes drive while cannabis-intoxicated." (Cannabis is the plant from which marijuana, hashish and the extremely potent hash oil are prepared.)

Highway officials, drug treatment professionals, research scientists and police officers from Maine to California all express profound concern about marijuana's mounting impact on our national highway-death problem. They also worry about the fact that many pot smokers say they often drive high because they *enjoy* doing so.

Hugh Alcott, a California State Department of Corrections probation agent assigned to the special narcotics section, points out a particularly dangerous phenomenon: "A lot of people who've had too much to drink and know their driving skill will be affected smoke a joint 'so they can drive better.' They actually believe that marijuana acts as an antidote to the effects of alcohol. All the pot does, of course, is to make them *feel* that they're driving better. In fact, their driving is far more impaired than if they'd used alcohol alone."

How Does Marijuana Affect Driving?

HERBERT MOSKOWITZ, a research psychologist at the University of California, has done more work than any other U.S. researcher on marijuana and simulated driving studies. In summing up his findings, he said, "The preponderance of evidence indicates that marijuana impairs skills performance, perceptual processes, attention and tracking behavior. All important components of driving are thus clearly affected."

Some of these components are impaired after only a low dose of marijuana—for example, impairment of "search and recognition abilities." After one joint, some drivers may become totally involved with a single facet of driving or with music from the car radio or even with a private reverie. Therefore, they might simply "not notice" a car exiting from a crossroad or a pedestrian who has just stepped into the street.

Other effects of marijuana intoxication on driving skills:

- Impairment of traffic-signal detection.
- Impairment of reaction time. Inability to brake quickly in rush-hour traffic or to move over quickly if another driver cuts in ahead.
- Impairment of short-term memory function and information storage. The driver may forget where to get off the highway or which crossroad to take—on a route he or she knows well.
- Impairment of coordination skills. Difficulty in backing up and turning around.

One test done by Harry Klonoff, professor of psychology at the University of British Columbia, involved 64 psychologically stable students, male and female. All had used marijuana before. Roughly a third of the students received a low-dosage marijuana joint. One-third were given a high-dosage joint. The third group received a placebo (a joint with the THC removed).

All 64 students drove through a closed course with no other traffic, and 38 of the students also drove a 16-mile route from the university campus to the traffic-heavy downtown area and back again. They were rated, before and after, according to the system used by British Columbia's Department of Motor Vehicles in examining drivers for licensing.

Final figures for the street-traffic test showed that those who had received the low-dose joint had a 42-percent decline in driving skills. Those who received the high-dose joint had a 63-percent decline in driving skills.

Even the "careful" pot smoker who "comes down" from his high before driving may well be a menace to himself and others on the highway. One and a half ounces of alcohol (the equivalent of a shot of whiskey) is excreted from the body in several hours. Marijuana, on the other hand, has 61 known cannabinoids (including THC) that appear to be fat soluble. It is speculated that they collect in body tissue—including the brain.

Legal Limbo

THE DRUNK DRIVER usually finds it hard to hide his condition if stopped by the police. But the pot-high driver often has the ability to "hide the high"—to collect himself, "come down" and carry on a normal conversation with a police officer and thus escape detection, making enforcement all the more difficult.

Also, with alcohol, we have the roadside "breath test" as a deterrent. Every state has specific laws so that the drunk driver can be defined and, if warranted, prosecuted. For marijuana intoxication, however, we have no roadside test.

In March 1980, an inexpensive, reliable method was finally perfected for detecting cannabinoids in urine. According to the National Institute on Drug Abuse's Research Technology Branch, "The cannabinoid test can determine in 60 seconds, with 95-percent accuracy, the presence of cannabinoids in the urine for up to 48 hours after a joint has been smoked."

This is a step in the right direction. Many hospitals and private clinical laboratories have the facilities for running the test, and now at least physicians and parents can be alerted about pot problems with youngsters. But until a roadside test is available to highway police, we are in a legal limbo in which no driver can be prosecuted for being marijuana-intoxicated.

One mechanism the body uses to rid itself of these cannabinoids is to allow those in fatty tissue to leak slowly back into the bloodstream to be metabolized and excreted. It takes about 2½ days for *half* the cannabinoids in a single joint to leave the body; it takes about two weeks to get rid of all the cannabinoids in a single joint. As one marijuana researcher put it, "Though the high is gone, the pot is not."

Deadly Duo

THE National High School Senior Survey, conducted by the Institute for Social Research at the University of Michigan, is the only national drug-abuse survey conducted annually. The 1980 survey showed that one out of every 11 seniors smoked pot daily, averaging 3½ joints a day. More than half of the 49 percent who had smoked marijuana "usually stayed high" for up to two hours each time they smoked, and 20 percent of those who smoked pot said that they usually drank at the same time.

How much of a driving impairment does such a mix of pot and alcohol really present?

In a study published in June 1980, Moskowitz and Marcelline Burns, a research scientist at the Southern California Research Institute, tested 12 healthy men (average age 26½) who used pot no more than twice a week and who did not take other drugs. The subjects performed a series of laboratory tasks, each related to a specific driving component (tracking, information processing, and so on). Each subject was tested at different times, under four different conditions. (No one knew what he was getting at any one time.) The conditions ranged from low alcohol and placebo marijuana to placebo alcohol (orange juice with a few drops of vodka floating on top) plus one marijuana cigarette.

Following this study, Moskowitz and research scientist Alison Smiley did a related one, but this time the subjects sat in a driving simulator, where they "drove" for 21 miles.

The results of both studies were virtually the same. The "alcohol only" subjects showed the well-recognized alcohol-caused driving impairments in reaction time, coordination, visual perception, attention and information processing. The "pot onlys" had all the same impairments.

But the results of dual use of alcohol and pot were, explained Moskowitz, "essentially additive." (One plus one equals two.) "Driving," he explained, "is obviously a multitask process. You must be able to do two or more things simultaneously. Alcohol impairs this ability in one way, and marijuana impairs it in another way. The alcohol-impaired driver tends to concentrate on one driving element to the exclusion of everything else. By sticking close to the center line for reference, the driver can keep the car from weaving but may be totally unable to attend to any unexpected highway happening. The marijuana-impaired driver, on the other hand, appears to have brief total 'dropouts' in his driving attention. Thus, taken together, alcohol and marijuana undermine the ability of the driver to process the roadway information necessary to control the vehicle safely."

Moskowitz summed up both the studies by saying, "Drivers under the combined influence of alcohol and marijuana have a greatly increased likelihood of initiating an accident."

In August 1980, Lawrence Sutton, executive director of Pittsburgh's Institute for Driver Research and Substance Abuse, tested the effects of marijuana and alcohol in a "closed" driving course. Sutton selected nine students from the University of Pittsburgh. All were experienced drivers, pot smokers and drinkers. Each drove on four successive afternoons, under four different "conditions":

1. pot (one joint) plus alcohol;
2. placebo alcohol plus one joint;
3. placebo joint plus alcohol;
4. placebo alcohol plus placebo joint.

During the 36 driving trials, patrolman Donald Dolfi followed the subjects in his own car, noting their performance, which included executing common procedures for a driver's license examination in Pennsylvania. He "pulled over" those drivers he would have suspected of "DUI" (driving under the influence)—if they had been on the road.

When the test was completed Dolfi said to Sutton, "I guess I spoiled your study. I only pulled over drivers 15 times."

But when the "double blind" code was revealed and Sutton looked at the figures, a chill went through him. Of the 15 incidents in which Dolfi "pulled over" drivers, three students were under the "marijuana only" condition, two were under the "alcohol only" condition, and one bad driver was under the double placebo. But all nine of the rest—100 percent—were under the alcohol plus marijuana condition.

The results of Sutton's study are striking indeed. They show that the impairments caused by pot plus alcohol are *more* than additive. They are synergistic. One drug potentiates ("fires up") the other. One plus one equals three or four on the impairment scale.

A further sobering fact is that *if* they had been on the highway, none of these drivers could have been prosecuted for DUI since they had such a low blood-alcohol-concentration level and since there is, as yet, no viable roadside test for the pot-high driver. All 15 "pulled over" for DUI by Dolfi would, therefore, have been "home free"—unless, of course, they had injured or killed themselves or others.

What Can Be Done?

IN ADDITION to horrendous personal costs in wrecked and lost lives, what are the dollar costs of the ever-mounting highway mayhem?

According to a study published in April 1981, "Only cancer outranks motor-vehicle crash deaths and injuries in dollar costs to the nation. The killing and injuring of people on the highways can be conservatively estimated as costing the United States some $20 *billion* annually in wasteful, unproductive expenditures, including $6.7 billion in medical, rehabilitation and other direct outlay."

William Haddon, Jr., M.D., president of the Insurance Institute for Highway Safety, which sponsored the 420-page report, points out, "With the appearance of this study, public policy makers must face the immensity of this tragedy in terms of its burden on the national economy—and, it is hoped, do

something about it."

At this time, most public policy makers have done very little about it. A few, however, are taking steps, at least along the alcohol/driving route.

Rep. Michael Barnes (D., Md.) and 50 other members of the House of Representatives have introduced a bill (HR 2488) calling for a mandatory sentence of at least ten days' community service, plus fines, participation in alcohol-treatment or traffic-safety programs, and mandatory license suspension for up to one year for first-time drunk-driving offenders—and for repeat offenders, the same, plus mandatory sentencing of at least ten days' imprisonment and suspension of driver's license for at least one year. An identical bill (S 671) has been introduced in the Senate by Sen. Claiborne Pell (D., R.I.).

Candy Lightner of Fair Oaks, Calif., has formed a national organization called MADD—Mothers Against Drunk Drivers. "As it stands now," says Lightner, "drunk-driving manslaughter is a socially acceptable form of homicide. That is why we are MADD!"

The organization has some 32 chapters in seven states. They work to alert the public to the serious consequences of drinking and driving, as well as to educate victims of drunk drivers and other concerned citizens as to what they can do to help resolve the problem in their state and community.

One state that has taken a giant step forward on the marijuana/driving front is Minnesota. In many states an open liquor bottle in the car of a DUI is considered *prima facie* evidence of a crime. In Minnesota, there is also an "open baggie" law. Anyone with any marijuana in the car—whether smoking it or not—is considered to have committed a crime. If involved in an accident or driving recklessly "in a serious way," he or she is treated within the criminal-justice framework. First offenders who have not endangered anyone must attend a mandatory "pot course" on the hazards of marijuana with emphasis on pot-impaired driving.

A second-possession offense usually means a fine of up to $500 and incarceration for a series of weekends in a county jail or work farm. But of the 9000 first-offenders who have gone through the four- to six-hour course, only 22 have been arrested a second time.

For more information on this award-winning "mandatory pot course," write Bruce Bomier, Director, Minnesota Institute, 2829 Verndale Ave., Anoka, Minn. 55303.

THINK OF THIS: each man, woman and child in the United States can expect to be in a car crash once every ten years. Since any of us can be imperiled at any time by the most deadly drug-related disease of all—Death on the "High"-ways—it behooves us to do what we can to halt this menace. ih

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MARIJUANA AND DRIVING: The Sobering Truth

A growing number of stoned motorists is endangering lives on our highways. Here's what must be done

By Peggy Mann

RECENT STUDIES blow the warning whistle on a little-publicized but nonetheless frightening new menace to motorists: the pot smoker driving "high" on the highways. Persuasive evidence is mounting that such drivers often have a distorted sense of space and time, altered peripheral and central vision, and impaired manipulative and coördination skills.

Surveys reported by the National Institute on Drug Abuse (NIDA) reveal that 60 to 80 percent of the marijuana users questioned sometimes drive while "intoxicated" on pot. Every day, increasing numbers of stoned drivers are endangering lives—as pot use escalates into what NIDA calls "a national epidemic among young people." (The latest countrywide survey shows that one out of every nine high-school seniors smokes pot *daily*, almost twice the 1975 figure.)

Our nation is both unaware of the marijuana highway crisis and unprepared for it. Many states have inexpensive and legally recognized tests for establishing alcoholic intoxication. However, we have no workable roadside test for marijuana intoxication. (NIDA is funding research on such a test, but it is probably three or four years away from being ready.)

In 39 states, possession of marijuana is still a crime, but enforcement is generally lax—and pot smokers know it. Of the 11 states that have decriminalized marijuana, only Alaska and Minnesota have thus far enacted a special increased penalty for posses-

sion of pot in a vehicle. In all 11 states, many pot-smoking drivers mistakenly believe that decriminalization implies governmental sanction to smoke marijuana—anywhere.

The politicization of pot has helped to obscure the picture. But when emotions and polemics are cleared away, both pro- and anti-decriminalization forces agree that it is dangerous to drive stoned. Even the National Organization for the Reform of Marijuana Laws (NORML), which supports removal of all legal penalties for possession of pot for personal use, "strongly discourages driving while under the influence of marijuana or any other drug, and recognizes the legitimate public interest in prohibiting such conduct."

The "legitimate public interest," however, is *not* being protected. Highway officials nationwide express profound concern. Richard L. Burton, former commissioner of Alaska's Department of Public Safety, is among the most apprehensive, saying, "The alcohol problem on the highways will soon be only half as serious as marijuana—and that's not because the alcohol problem is going to get any better!" And Lee Dogoloff, White House adviser on federal drug policy, states: "It is essential that Americans understand the very real hazards of driving while marijuana-intoxicated."

► *How much does marijuana contribute to traffic accidents and fatalities?* Research findings have been remarkably consistent. In 1975, the Boston University Traffic Accident Research Team surveyed 267 drivers deemed "most responsible" for a fatal accident. Sixteen percent of the 267 drivers had been smoking marijuana prior to the fatal accident. Statistically, "marijuana smokers were over-represented in fatal highway accidents," the study concluded. Other traffic-fatality studies in Albuquerque, N.M., Baltimore, and in Oklahoma City yielded a similar incidence of marijuana involvement.

California's Department of Justice has made the first large-scale study directly relating marijuana to traffic arrests. The study, completed last year, covered 46 of the state's 58 counties and examined 1792 blood samples (randomly selected from 19,000 turned in by the California Highway Patrol) from drivers arrested for traffic accidents or for driving under the influence of drugs. The tests were made with an expensive radioimmunoassay laboratory technique that can analyze blood samples for molecules of THC (tetrahydrocannabinol), the chief mind-altering ingredient of marijuana. Sixteen percent of the 1792 arrested drivers had sufficient THC in their blood to constitute marijuana intoxication.

Victor Reeve, supervisor of the California study, pointed out: "This must be regarded as a conservative figure because, of the drivers arrested, fewer than half agreed to give a blood sample. How many of the remaining drivers were under the influence of marijuana we will never know."

► *How does pot affect driving*

abilities? More than 50 studies have been made in the United States since 1970, when standardized grades of so-called "NIDA marijuana" were made available to researchers. Says Herbert Moskowitz, a University of California research psychologist who has probably done the most work on marijuana with simulated driving studies: "The preponderance of evidence indicates that marijuana impairs skills performance and perceptual processes, including vision, attention, and tracking behavior—all important components of driving performance."

Such impairments as tracking performance are significant after two "street joints." Drivers may imagine they are doing a fine job of keeping the car in the correct lane, when in fact they are weaving.

In addition, marijuana can cause: impaired night-driving abilities, impaired short-term memory function, impaired concentration, impaired ocular motor control and impaired vigilance.

These results are generally obtained in driving-simulator tests—and most people drive *better* under simulated conditions than they drive normally.

However, one test was carried out in *actual* driving conditions by Dr. Harry Klonoff, professor of psychiatry at the University of British Columbia. He chose 64 psychologically stable subjects who had used marijuana before. One third were given a low dosage of one street joint, one third received a high dosage of two joints, the other third received placebos. With dual controls and an observer in each car, all 64 volunteers drove through a closed course with no other traffic. Low-dose subjects showed a 33-percent significant decline in driving skills, while high-dose subjects showed a 55-percent significant decline.

Thirty-eight drivers also covered a 16-mile route from the university campus to the traffic-heavy downtown area, and back again. These 38 were rated by the system used to examine drivers for licensing. Final figures for the road test showed that those on the low dose had a *42-percent decline* in driving skills, while the high-dosage subjects had a *63-percent decline.* Unusual driving behavior, Klonoff reported, included missing traffic lights or stop signs, poor handling of the vehicle in traffic, unawareness of pedestrians and stationary vehicles.

Of 11 behavioral components tested, the three of greatest vulnerability were judgment, caution and concentration—despite the fact that some of the subjects paid special attention to their driving to prove that pot had no impairing effects.

► *How long does marijuana continue to affect driving skills?* Studies in 1972 showed a definite decrease in skills performance 5 to 6 hours after intake of a strong social dose of marijuana. Another worrisome factor, reported in 1976 by NIDA, is that a person may attempt to drive without realizing that his functioning is still impaired—even though he

or she no longer feels "high."

A 1972 study of driving behavior in a safety-controlled area showed a "marked" decline in driving abilities was still present 5 to 6 hours after intake, a "definite" effect 8 to 10 hours after intake, and a lingering effect as long as 24 hours later. Another factor: Many chronic pot smokers reported that only a few puffs of "good pot" (with a high THC content) can result in a sudden intense high (if this happens on the highway it can be frightening and dangerous).

► *Do pot users recognize the danger of driving while stoned?* Chronic pot smokers tend to view their driving impairments through rose-colored glasses. Among more than 1000 people arrested for marijuana possession in Minnesota, 25 percent thought pot had no effect on their driving. More than 25 percent thought pot actually improved their coördination. Some enthusiasts *prefer* driving stoned, saying that it becomes less boring. "I get more into my driving" goes the refrain.

Dr. Joseph Davis, the medical examiner in Dade County, Fla., with Arnold W. Klein and Dr. Brian D. Blackbourne surveyed 571 local college and post-graduate students on pot and driving. In every driving category former and infrequent users sharply downgraded their ability to perform while stoned, while chronic pot smokers gave themselves quite good grades. Despite their cheery assessments, 53 percent of the chronic users had been stopped by police for driving under the influence of drugs; 22 percent had three or more violations, compared with 2.3 percent of non-users. Eight percent had had their license revoked, compared to one percent of the non-users.

The alcohol-drunk driver usually finds it hard to hide his condition, if stopped by the police. But the pot-high driver often believes he can "come down" and carry on a seemingly normal conversation with a police officer. This apparent ability to "hide their high" gives many pot smokers confidence that they can drive stoned.

One such self-assured driver, a 30-year-old medical sociologist—a heavy drug user and daily pot smoker for about five years before he swore off drugs—reported smoking a few joints at a friend's house. Then he borrowed his friend's car, certain that he could handle whatever might turn up on the road—including the police. "But," he recalls, "as I drove down one of the busiest streets in the city, the dream-like pleasure I usually felt when driving stoned suddenly burst into a total psychedelic experience. All I could see was a myriad of tiny dancing lights. I was so totally spaced out that I had no awareness of even being *in* a car, much less driving one."

When a traffic light turned red, he didn't notice it, and crashed into a small car. He got out, danced a little jig, walked away and wandered around the city for hours. "I knew something had happened. But I didn't know what."

Around 4 a.m. he remembered, and turned himself in to the police. He learned that he had wrecked his friend's car, and had totally demolished the small car in front of him—which had, in turn, crashed into the sedan in front of it. Remarkably, no one had been seriously injured.

► *What can be done—now?* We need not wait helplessly until scientists come up with a roadside kit for testing THC levels, and states enact laws to deal with marijuana-intoxicated drivers. There are two avenues we can take right away.

First, state legislatures should immediately pass laws imposing a high fine and/or other stiff penalty for possession of marijuana *in a vehicle*—including taxis, buses, trucks, trains and planes.

Second, we must inaugurate educational programs by governmental agencies, insurance companies, foundations, private groups and, especially, high-school and private-driving instructors. (A friend of mine taking a driving course was offered a joint by an instructor, "to relax.") Coördination of effort will increase the impact of the message: *it's dangerous to drive stoned.*

Brochures should be distributed at toll booths, gas stations, garages. Car users are a captive audience, and "spot warnings" can be tailored to a range of radio programs. The American Automobile Association and National Safety Council could begin a nationwide information campaign.

Unless we move in these directions, warns NIDA's Robert Willette, who is responsible for developing THC test kits, more and more pot users will be driving high. "We can only hope that growing awareness of the problem," he says, "will prevent a national disaster."

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Senator HUMPHREY. Thank you, Mrs. Mann.

I want to welcome Senator Pell. Senator Pell has been one of the more active members of the Senate in addressing this drunk driving problem. Senator Pell, do you want to make an opening statement at this point? We will interrupt the testimony if you wish to do so.

Senator PELL. Yes; I do have a little opening statement I would like to make.

Senator HUMPHREY. Fine.

Senator PELL. I thank you, Mr. Chairman, for your courtesy, and congratulate you on your holding this hearing. I appreciate your invitation to participate in it.

The American people have awakened in the past several years to the truly devastating impact of alcohol and drug abuse especially on our Nation's highways. Not one of us needs to be reminded of the 25,000 lives lost each year because of drunk driving. Many additional lives are lost on the highways because of the actions of drug-impaired drivers, about which this hearing is concerned.

Perhaps the most tragic aspect of the problem is the very, very cruel impact it has on young people particularly. The Department of Transportation estimates that 44 percent of all night-time drunk driver fatalities involve the 16- to 24-year-old age group, although that group comprises only one-fifth of all licensed drivers.

Most of our young people are on the road Friday and Saturday nights, when studies have shown that 1 out of 10 cars on the road on these nights is driven by a person who is legally drunk.

As parents and as concerned citizens, these problems require our commitment to not only more effective law enforcement but to improved identification and treatment of the offenders.

I was proud earlier this year to have sponsored along with Senator Danforth legislation encouraging the States to enact comprehensive alcohol safety programs. This bill passed the Senate with 38 cosponsors, and with similar legislation pending in the House perhaps we will see—I hope we will see and expect to see—a national incentive grant program in place before the year is out. Essential to the success of this effort are continued efforts at all levels of government to increase public awareness of this problem and to improve existing treatment programs.

Mr. Chairman, I have a couple of questions to address to Mrs. Mann, but I gather the procedure is that we let all three panelists proceed and then we ask questions. Is that correct?

Senator HUMPHREY. Well, that is the normal procedure.

Senator PELL. Fine.

Senator HUMPHREY. But if you are constrained by time, I would be delighted to change that procedure.

Senator PELL. No.

Senator HUMPHREY. Very well. Dr. McBay?

Dr. MCBAY. I speak, first of all, for myself, not the State of North Carolina or the medical examiner's office. I am not saying they are in disagreement with me, but I think I had to make that statement, Mr. Chairman and members of the committee.

Having an interest in drugs and driving which extends, over 30 years, alcohol and driving and, more recently, going back 15 years when we started looking for drugs—and we have continued up

until the present day, and I am sure as long as I am functioning that we will continue to do so.

In North Carolina an opportunity arose whereby we felt we could look at drugs and driving. We looked at some dead drivers back 3, 4, or 5 years ago with a $136,000 project that netted 74 cases. With the improvements in technique, some that we have contributed, we now have studied 600 dead drivers, single-vehicle operator fatalities, and did it for $30,000.

We examined and looked for a selected group of drugs. We selected the group of drugs because there were assays that we could do with great sensitivity and in batch quantities. The techniques were such that we could stay within the price. These were the ones we selected. They are not a bad group of drugs: alcohol; we have an assay that can detect marihuana in blood in passive smoking. Four people in an 8-by-10 room each were smoking 3 percent marihuana cigarettes.

My graduate student who was there smoked no marihuana; we detected marihuana in his blood at a very low concentration, but we detected it. He was not affected in any way, but that gives an idea of the assay sensitivity. We were not satisfied. We sent the results to another laboratory and, by much more elegant methods, they were able to confirm not only the drug but its metabolites. We did not smoke beforehand. We did run his blood before the experiment.

The group of drugs we chose in addition to alcohol, which we have been doing routinely now—I have been maintaining statistics on alcohol for over 13 years in North Carolina, and 13 years in Massachusetts. We also looked at marihuana (THC); methaqualone; barbiturates; opiates, which are morphine, codeine, and heroin (PCP), or phencyclidine; cocaine; and amphetamines. These were the drugs of abuse sought.

All of the assays used were extremely sensitive. We could detect the incidence of somebody taking one-tenth of a dose of a barbiturate, to give you some idea of the sensitivity we are dealing with.

These tests could be performed economically. The single-vehicle operator was chosen because we feel that he is most likely to contribute to his own demise. It is not necessarily true, but it is certainly more so than when we have two people having a head-on collision and obtaining blood from only one operator and not the other one. We do not know—it depends on who we get. The innocent individual who was perfectly sober is just as apt to get killed as the individual who was either drunk or under the influence of drugs.

We had about a 66⅔ sample out of the total number of single-operator deaths in North Carolina that we received bloods that we could use. We excluded people who ran off the highway who were 80 or 90 years old, who had no evidence of trauma, and were shown to have a ruptured aorta or something else—a natural death. We excluded people who had been in the hospital for some period of time. We could have included those, and that would have lowered our finding of drugs, or we would find other drugs that they received in the hospital.

We looked at cases where the records were available. We did not ask for anything special. The North Carolina medical examiner

system asks for blood and receives it in most all operator deaths, so we asked for nothing special.

When we made this analysis of 600—and we did it over a 3-year period, plus 4 or 5 days. We decided we wanted to round 596 off to 600, so we randomly chose the next 4 suitable cases in the following month; this would have been in October of 1981.

What were our findings? Well, a couple of things have to be said. I suppose we could do a survey asking people whether they smoke marihuana. You can do driving studies under controlled conditions. They lack one thing. You do not get killed when you go into a driving study unless you are really wild. This is true of a fellow flying a Link trainer. No matter what mistake he makes, he may wash out of his job, but he can come walking out of that Link trainer. That is a very real problem in designing studies.

A number of these studies have been done, and when I state that I do not see evidence of marihuana, I say "evidence." I go to court quite frequently and, to me, evidence is something I am willing to say with reasonable certainty that what I am talking about is supported by what I call evidence, an analytical determination or something of that nature.

This is what has not been done in this country. There has not been a great deal of evidence presented that this is a problem. Do not get me wrong; I do not believe anybody should take any drug, including alcohol, and drive, although I do drink. I guess if it were illegal, I would not drink; I hope I would not. As a pharmacist, I do not believe anybody should take a drug for which there is not a condition that warrants the use of the drug.

When we completed this study, what did we find? First of all, we found that our previous data on alcohol was too low because we never took the time, nor did we have the time or the personnel, to cull the data and get rid of those cases that are not even called auto deaths—the elderly individual who drives off the edge of the road.

We raised our figure on alcohol from anywhere from 56 to 61 percent single-vehicle operator crash fatalities who had alcohols greater than 0.10 percent, up to 67.5 percent, and had another 11.5 percent who had been drinking. In other words, we were looking at a sample of 79.5 percent of individuals out there who had been drinking.

Now, when somebody says somebody had been taking drugs, you might look at it in the same way. Are they the group that might have only a very small amount of drugs or do they have a large amount of drugs in them?

When we looked at the overall picture with a very sensitive assay, we found that in 47 out of the 600 deaths, there was marihuana in the blood—not only marihuana but also its metabolite. We wanted to be sure of what we were looking at. We threw no cases out. We ran these four times. We ran them double-blind.

The finding is that if we look at the 47 cases, 70 percent of those people had better than 0.10 percent alcohol and could have been arrested for driving under the influence. Some of them had as much as 0.35 percent alcohol, and people can drive with even this amount. They do not drive properly; they probably cannot walk, but they can drive.

We found significant quantities of marihuana in some people. For instance, we found a person with a very high concentration of marihuana. That person had 0.27 percent alcohol, and also had PCP. This person was obviously a hazardous individual for at least two or three reasons.

We had approximately 10 cases where I would consider there was a significant quantity of marihuana, as represented by THC, or tetrahydrocannabinol, in the blood. If you seek those who could not have been arrested for driving under the influence, we are now talking about three people in that entire study. In those three, the concentrations were relatively high.

Marihuana peaks in the blood before you stop smoking. In other words, if somebody smokes for 7 or 8 minutes, it peaks in 5 minutes and goes down rapidly. This would give you some idea of the problem of trying to devise an instrument—a black box or anything else for testing for this one drug; leave alone testing for all the rest of the drugs. You are not going to find it on the breath, unless it is there when the person just recently smoked it, and you are not going to find it in saliva.

If you examine urine, you may find it for 1 week or 2. This does not mean that it is eating away at your soul, as some people have said. If it is, it is one of the most powerful drugs in the world.

I want to repeat that I do not advocate the use of any drug. I have never smoked marihuana. In fact, I would not even go in that room when it was smoke-filled because I do not want to be exposed to it. The highest person I saw on marihuana was a person being injected. Incidentally, he was not being injected with marihuana at all; he was being injected with human serum albumin. He was jumping all over the table. He was an experienced marihuana smoker. This gives you an idea of how easy it is to evaluate a marihuana high. This man was receiving none. He was receiving it by intravenous injection in a controlled study.

The fellow in the adjoining room, who had received 8 milligrams of tetrahydrocannabinol by intravenous injection, was calm and collected. He just said, "I have had enough; I have got a high." I talked to him and got some interesting information from him.

In addition to marihuana, we found phenobarbital in most instances when we found barbiturates, and we found dilantin in some of these. If you allow an epileptic to drive, you surely better allow him to have his anti-convulsant. I investigated one case of a truck-driver who drove up on the sidewalk and killed an individual. The driver was supposed to be on phenobarbital and dilantin. There was none in his blood, and my reasoning is that this man should be charged with vehicle homicide because he did not have a drug in his blood.

Finding a small amount of valium in the blood—I do not advocate the use of it—may tend to make the person a little bit calmer. I cannot prove this. A Canadian marihuana study that was cited, Dr. Klonoff's study, showed 63 percent of those tested had a decline in driving skills, as quoted from "Science," a reviewed article. Thirty-seven percent showed no decline, and 17 percent of the people in that study improved.

I am not citing that study as a reason for smoking marihuana, but I do bring up the fact that I have to testify in court and if I go

to court and say that 17 percent of the people in a study improved after smoking marihuana, I know what the defense attorney is going to say. How do I know that his client did not improve? I would have to admit I do not know. Therefore, there is a reasonable uncertainty in my testimony and I cannot testify that way because the charge under oath is a little different than that.

We found rapid-acting barbiturate in one individual. I do not think that person should have driven, even though it was a relatively low concentration.

We investigated methaqualone. We found 16 cases in the last year of our study out of 260 cases, and that was because a reagent became available at that time. Actually, four cases did not have high amounts of alcohol. One of them had an awful lot of tetrahydrocannabinol; it was one of our tetrahydrocannabinol cases that had no alcohol, but had one of the higher amounts of methaqualone. Methaqualone, or quaaludes, will, I am pretty sure, being central nervous system depressants, alter driving, and I would be willing to testify that at certain concentrations it might do that. But concentration is an important factor.

We found opiates in three individuals. One of those had 0.10 percent alcohol; the other had none. Of course, the assay is sensitive enough that they could have been taking codeine cough syrup. We found phencyclidine in three individuals. All three were under the influence of alcohol, and one of these cases I cited previously had tetrahydrocannabinol. We found cocaine in two; one of these individuals was under the influence of alcohol. We found amphetamines in none of the 340 cases we investigated. We stopped looking for it. We felt it was wasting reagent and time and we replaced it with the methaqualone assay.

In summary, for this part of it we did not find in North Carolina, in the 3-year period we looked at, a very important incidence of drugs and driving. I do not want this to be taken that I say that people might drive with drugs. I do not know that, and I do not think anybody else knows that. But we did not find high incidence in this very important group of drivers.

I think more studies like this should be done; it is not my fault that they are not done. We have been asked by Dade County if we will be willing to run marihuanas for them, they do not have marihuana information. They are running urines down there and this is causing them a problem. They are finding it in the urine, but if somebody can find marihuana in somebody's urine a week after they have smoked, does anybody believe that that has affected their driving? I, as a scientist, cannot say that it affected their driving.

The other studies that I have cited——

Senator HUMPHREY. Pardon me, Dr. McBay. We have a vote underway on the floor which I am going to have to leave for in a moment. Are you nearly finished?

Dr. MCBAY. Yes, I am.

Senator HUMPHREY. OK. I am going to have to leave in about 2 minutes or I will miss this vote.

Dr. MCBAY. I have looked for other studies and the ones I am looking for is where a drug has been quantitated. I found two, one

in print, one not—the Canadian study and there is a study in Chicago, and they essentially say the same thing.

In other words, what I am saying is I know nothing about the incidence, but I know the evidence is not there. I would refer you to the report made to Congress in 1980. The recommendations are excellent; they still stand today. Research needs to be done. I do not think the roadside study, one of their recommendations, will be accomplished.

The analytical methods are there. They can be done; they certainly can be done on blood. I will summarize by saying that we have not found a significant drug problem.

Senator HUMPHREY. Excuse me. I think it would be best if I suspended at this point and let you summarize when I return. That way, it will be fresh.

Dr. MCBAY. Fine.

Senator HUMPHREY. I am going to have to suspend the hearing for about 10 minutes.

[Whereupon, a brief recess was taken.]

Senator HUMPHREY. Dr. McBay, you were about to summarize. Will you proceed, please?

Dr. MCBAY. Yes. I would like to again state very emphatically that this should not be taken as an endorsement for marihuana or any other drug, including alcohol. It merely means that we did not find in this particular survey and study a very great incidence of excess amounts, even therapeutic amounts—and there is no such thing with an illegal drug or illicit—in the drivers that we examined.

I feel that we need more research of this type because it will be said, I am sure, as it has in other work we have done, that this is peculiar to North Carolina. I do not believe that. I believe that different results certainly would occur if you looked at New York City or Miami or Los Angeles. I am not sure which way.

I think that we have to do something about the drunk driver, whether it is drugs or what it is. I know what the problem is. We arrest 96,000 people for driving under the influence. We have had people convicted 20 more times in North Carolina; we have 500 people in prison. We do not have room in our prisons for them.

I think what we should be doing is probably setting up an intermediate-type prison, a less expensive one, where people pay room and board and you just put the drunk driver in there, let him go to work, back and forth, and let him live that way—how long, I do not care. If he is convicted 20 times and he has killed somebody on the highway, he may spend his life there.

I am also preparing for the Committee on Alcohol and Drugs, and have circulated and prepared a statement on the status of drugs and driving, and it is in the notes that I gave you. I will not repeat it. It essentially says that we do not have all the tools; we do not have all the information. There is not enough information for experts to testify that indeed driving deteriorates with drugs.

Now, we are not saying that it does or does not. We are just saying we do not have the expertise. With alcohol, I have no problem in testifying. At a certain concentration, I feel that everybody deteriorates. I do not have that for other drugs, and I am not sure when we will get it.

I would like to leave it at that point.

[The prepared statement of Dr. McBay follows:]

Marihuana and Driving: Incidence of THC in 600 Dead Drivers.

Arthur J. McBay and Andrew Mason, Office of the Chief Medical Examiner and Dept. of Pathology, Univ. of N. C., Chapel Hill, N. C. 27514.

A selected group of drugs were sought in specimens of blood submitted to the Toxicology aboratory of the Office of the Chief Medical Examiner. This study was supported by the Governors Highway Safety Program. All specimens were analyzed which met the criteria of the project: 1. Single-vehicle operator accidental deaths which occurred between September 1, 1978 and September 30, 1981 and the first four suitable specimens in October 1981 to make 600 specimens. 2. Death occurred within one hour after the crash and subjects did not receive fluids or drugs during this time. 3. At least 5 ml of suitable blood was submitted. 4. Records were available to establish the above.

Of the 394 cases that could have been submitted in 1981, 363, (92%) were, and 260 (66%) were suitable. Blood specimens were analyzed for alcohols, THC (marihuana), methaqualone, barbiturates, opiates (morphine, codeine, heroin), P.C.P., cocaine and amphetamines. These analyses were chosen because they could be performed economically, on small amounts of specimens, with good sensitivity and specificity. They are the major drugs of abuse that many believe might adversely effect driving. The single-vehicle operator fatality was chosen because we believe that he is more apt to be at fault than an operator involved in a multiple-vehicle crash. We may not obtain blood from an operator at fault in a multiple-vehicle crash or pedestrian fatality. The mere presence of a drug does not mean that the operator was impaired. Except for alcohol and high concentrations of a few drugs, very little is known of the effects of drugs on driving. No data base is available to compare the findings of this study with the occurrence of drugs in drivers not being killed in single-vehicle crashes.

Marihuana might have added to the alcohol impairment of 25 (4%) of the drivers. Marihuana and methaqualone were present in significant amounts in one driver. Marihuana alone was present in a significant concentration in one driver. Methaqualone might have added to the alcohol impairment of 7 of the drivers. In addition to the above-mentioned case where marihuana and methaqualone were found, methaqualone in significant concentration was the only drug found in one blood. Enough barbiturate was found in 4 bloods to affect, possibly adversely, driving. Enough alcohol was found in the following cases to affect adversely driving: one of the 3 opiate cases, all 3 PCP cases, one of the 2 cocaine cases. No amphetamines were found in any of the cases examined.

Drugs were present in 10 (1.5%) of the cases which had no alcohol.

Marihuana alone might have affected one of the 600 drivers.

Alcohol was present in 469 (79%) of the drivers. Alcohol alone in 411 (68.5%).

SUMMARY: Alcohol was found in 469 (79%) of the 600 drivers, with concentrations of 0.10% or greater in 406 (67.6%). Other drugs were found in 84 (14%) of the cases, together with alcohol in the majority of the cases, and when alone the concentrations were relatively low with few exceptions. It appears from this study that alcohol was by far the major drug of abuse found and that other drugs of abuse alone were not very significant. We believe that alcohol occurs with such overwhelming frequency compared to other drugs in operators killed in crashes, that to divert resources from attempts to solve the alcohol problem would be counterproductive.

OTHER STUDIES OF THE ANALYSIS OF BLOOD OF DEAD DRIVERS FOR DRUGS

Cimbura* (1980) reported on the analyses of 401 blood specimens obtained from dead drivers in Ontario from April 1978 to March 1979. Alcohol was found in 57% of the specimens. In 14% of the cases alcohol was present in combination with other drugs, and in 12% other drugs only were found. Sub-effective concentrations of THC were detected in 14 (3.5%) of the victims. Salicylates were detected in 6 % of the drivers, and diazepam in 3%, and codeine in less than 2%. The concentrations of salicylates and codeine were in the low therapeutic range.

Spikes (1982) reported on drugs in dead drivers in Illinois outside Cook County. About half had 0.10% or more of alcohol in their blood. This figure rises to about two-thirds at 0.05% or more. Less than 2% had drugs and were alcohol-free.

I have not heard of any studies which indicate a greater number of incidences or more significant quantities of drugs in drivers killed in crashes.

REPORT TO CONGRESS-1980

An excellent report was made to Congress in 1980. It was entitled "Marijuana, Other Drugs, and their relation to Highway Safety." The conclusions and recommendations in this report are valid today. The conclusions were: With the exception of alcohol, no drug has been established to be a high priority highway safety concern. The frequency with which drug-impaired drivers drive, are arrested, or are involved in crashes is not known. Drugs which may impair driving, which are used by drivers, include prescription and over-the-counter drugs as well as illicit drugs. The information on marijuana and driving is incomplete and does not support arguments either for or against establishing marijuana as a high priority highway saftey concern. It is unlikely that blood will be obtainable in roadside surveys.

Recommendations concerning interdepartmental cooperation; epidemiological,experimental, and behavioral research and the establishment of a panel of experts by the National Academy of Sciences are worthwhile.

Since that report, analytical methods for drugs have improved and a few studies have been reported. In general the studies do not reveal a significant drug and driving problem except for alcohol.

The breath of impaired drivers may be tested for alcohol with readily available instruments which may be operated by officers after a brief training period. No such devices exist for any other drugs. It is unlikely that breath, saliva, or urine will be useful for the determination of recent (an hour or so) drug impairment. Blood must be analyzed by qualified analysts and the results must be interpreted by experienced experts. Adequate analyses are expensive, not readily and widely available, and interpretation is difficult and limited in availability and scope.

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Cimbura et al (1980) T.I.R.F. Reports, Ottawa, Canada.
Spikes (1982) personal communication

CONTROLLING ALCOHOL-IMPAIRED DRIVERS BY LIMITING THEIR FREEDOM AND DRIVING

Many attempts have been made to find ways of keeping the alcohol-impaired drivers off the highways. None of these seem to have had a satisfactory impact on the problem. A new countermeasure is offered which is based upon limiting the freedom and driving of the convicted driver.

In North Carolina in 1981, 96,404 drivers were arrested for driving under the influence of alcohol, 45,705 (54%) were convicted as charged, and 22,151 (26%) were acquitted. It appears that enforcement is good. During 1981, 1487 people were killed in crashes. Of the operators who were killed in single-vehicle crashes, 62% were under the influence, and 13% had been drinking. More than 370,000 drivers have been convicted of driving under the influence, more than 10,000 drivers have been convicted 5 times, 265 have been convicted 10 times, and 2 drivers have been convicted 20 times. Thousands have been arrested and convicted and could have been imprisoned. In 1980, 578 people were admitted to prison for driving under the influence. It costs more than $10,000 a year to maintain a person in prison.

It is unlikely that better enforcement or that harsher penalties will improve the situation. Judges and juries are reluctant to imprison people even for multiple motor-vehicle convictions. License suspension does not appear to deter many from driving. Both of these sanctions usually prevent the breadwinner from earning a living and may force dependents to seek public assistance.

An alternative to imprisonment might be helpful. The offending driver could be sentenced to a "barrack type" existance. He would be required by the court to report to a facility and live there whenever he is not at work. He would be allowed to drive to and from work, checking in and out immediately before and after work. He would be required to submit to a breath alcohol test anytime it is requested. He would pay for his board and room. A house, building, or trailer could be used to house the detainees. No guards should be required, but an attendant would be needed to check the detainees in and out, and to see that the person stays there. Those who deviate in any way could be remanded to the court. Facilities could be provided for driver reeducation, alcohol rehabilitation, treatment, etc. People could be detained for increasing amounts of time, each time they are convicted. Detainment should be mandatory for the 3rd conviction.

Millions of dollars could be saved if other criminals who have been convicted of non-violent crimes were treated in a similar manner. This would remove many criminals from prison and make more room available for the detention of violent criminals.

WHY DON'T MOST DRUNK DRIVING PROGRAMS WORK?

People whose blood alcohol concentrations exceed 0.10% may have their judgement altered to such an extent that they believe that their driving ability is excellent when in reality it is poor. They may insist on driving in spite of any warnings, training, education, and punishment. THEY KNOW THEY ARE NOT DRUNK! They must not be allowed to drive until there is assurance that they will not drive after drinking excessively.

Operators who drive erratically should be arrested and tried for reckless driving if no alcohol or other drug is found in them.

Drivers with multiple convictions should be confined when they are not working.

THIRD ROUGH DRAFT STATEMENT ON CURRENT STATUS OF DRUGS AND DRIVING
NATIONAL SAFETY COUNCIL'S COMMITTEE ON ALCOHOL AND DRUGS

There is widespread belief that there are many drivers operating motor vehicles while impaired by drugs other than alcohol, and that analyses of blood or some other specimen will permit scientific opinion useful as legal evidence, concerning the degree of drug-induced impairment.

It has not been firmly established that there are many drivers under the influence of drugs such that their normal driving ability is impaired to a point that they constitute a significant hazard on the highway. Some studies have been reported which indicate that the incidence and concentrations of drugs in body fluids are low, and some studies are underway, but generally there is not sufficient information available on most drugs for scientific-expert witnesses to use as a basis for opinions concerning driving impairment.

Studies are urgently needed to confidently establish the incidence and the adverse effects of drugs on driving ability, and research is needed to develop recommended methods of analysis for drugs and metabolites in blood taken from drivers for legal purposes.

Laws should be enacted making it unlawful for a person to operate a motor vehicle while impaired by a drug. For some drugs it might be possible to establish a concentration below which there is reasonable doubt that driving would be impaired, and another concentration at or above which driving is most probably impaired.

Analysts should be certified to assay for drugs by approved methods, if results are to be used for legal purposes.

Notwithstanding the foregoing limitations, if competent analyses are available and if qualified scientists are able to interpret results in particular cases, then tests should be done and made available to the courts.

Senator HUMPHREY. All right. Thank you very much for your testimony. I note that it differs substantially from that of Mrs. Mann, and we will have some questions on that score later. But let us proceed to Dr. Maickel.

Dr. MAICKEL. Thank you, Senator. I would like to start out by commenting on the fact that I think it is most appropriate that your subcommittee, and indirectly thereby Senator Hatch's committee, look into this area because the problem of drugs and alcohol and driving really is just one chunk of the problem of drugs and alcohol and public safety—for example, the impairment of the worker in the work place and the impairment of the housewife at home by substances that might best be called drugs, and I want to address this point first.

When we talk about drugs, we must include alcohol as a drug. We can talk about drugs and alcohol, but we really should talk about drugs including alcohol. Alcohol is a drug. There is no question that it is a major cause of highway fatalities. This is not to say that there are not any other causes, and I will return to that.

However, the problem is that alcohol is a unique drug. It is easy to measure. We have spent 30 years determining exactly how we can correlate blood levels, and more recently breath levels, of alcohol with impairment and with accident risk. That is all very nice. As a scientist, I can say that is beautiful; that is exactly what we need to do for every drug.

The cost in dollars, in time, and in technology is, for all practical purposes, impossible. For example, if we wanted to do—and this is a quick and dirty, if you will estimate—if we wanted to do a functional and legally acceptable information package for one single drug that has been accused of being everything from a major problem to no problem at all on the highways—I am talking about diazepam. Valium is the trade name for it—if we wanted to do an information package, legally acceptable, to do blood level studies, and that is the only thing we could do—breath and urine are useless for a number of reasons—to do blood level studies that would enable us to set a standard for blood level of Valium and/or its metabolites in the human being comparable to what we have got with the BAC of 0.1 or 0.08 for alcohol, a rough estimate is that it would take us from 4 to 6 years, 12 to 15 man years of professional effort, and that is Ph. D. or M.D. level, and at least $25 million. That is for one drug; we cannot afford it.

Very frankly, my feeling is that drug analysis can define the possible problem of a drug on the highway or a drug in the workplace. It cannot be used as a measure to enable enforcement of an impaired driving law.

I mentioned urine and breath. Urine is useless because pharmacokinetics—the science that relates the level of drug in the body to the impairment of an individual—cannot use urine; it is after-the-fact evidence. It is impossible to correlate urinary levels today with performance today, because that drug may have been excreted, may have passed through the body 24 or 48 hours, or in the case of marihuana, a week or two ago.

Breath levels are virtually impossible, given our present technology. The instrumentation just is not there. For a volatile drug like ethanol, it is great; for other drugs, forget it.

So, what are we left with? We are left with a way of deciding whether or not an individual operating a motor vehicle is impaired. I would like to propose a scenario, because this is a very interesting one, or rather a set of scenarios.

Consider three drivers; I will throw in a fourth one as a bonus—the classic alcohol driver, someone who has a blood alcohol level of 0.2, which is double the accepted minimal standard in most States for driving while intoxicated; a second driver who has been smoking pot for the last 8 hours and is higher than a kite; a third driver who has ingested any street drug of abuse or any legal pharmaceutical drug that will definitely impair; and then a fourth individual, a worker who on a particular day in question takes his morning analgesic tablet because he has a work-related hip injury, consumes an over-the-counter antihistamine because he happens to have the sniffles or a cold or allergic rhinitis, or whatever you will. He has his usual two beers for lunch—not enough alcohol to impair his driving at all, and he does not drive until he goes home anyhow. He works in an atmosphere full of volatile solvents all day. He drives home in a car with his four carpool buddies, all of whom are heavy smokers, and in the winter time when he has the windows rolled up, the heater on, and a slightly leaky exhaust system.

All four of those drivers could be equally impaired, and there is no drug test now or in the foreseeable future that is going to give

us that answer. What we need is to be able to measure impairment.

I would suggest very strongly—and this, at first glance, may sound like a light treatment, but it is not; it is meant with a lot of thought—that we are developing a society that from perhaps age 6 on up is tuned to playing Pac Man and other video games. Why not develop a simple test system—portable, cheap, easily usable—that you would take when you get your operator's license.

At any time later on the highway, you could be stopped, if your driving is erratic, and tested on this system, and you are familiar with the system. And if it shows a degree of impairment, then look into the cause. This may be one way of approaching it.

I would also like to suggest very strongly—and I have worked with DOT and NHTSA over the years on some projects, that there is another area that the Federal Government can look into. I would even offer a challenge to the DOT in this regard.

If you look at the chapters or paragraphs or pages in the high school driver training manuals that are addressed to the question of drugs and driving, what you will find that in most of them there are virtually none. There may be a chapter on alcohol; they may show you a breathalyzer; they may talk about 0.08 blood alcohol. But as far as drugs are concerned, there is nothing.

I would issue this challenge to DOT: come up with an outline for a manual that could be distributed to all the States as a model for their driver training programs in the schools; work with the youth.

Finally, the last point that I would make is I realize that the big word today is, get rid of big brother; keep the Federal Government out of things; do things locally. There is one thing that the Federal Government can do, and this hearing is really a part of that and I would like to see more of it.

The Federal Government should exert a leadership role. It should not necessarily tell the States what to do in this regard, but it ought to be able to say, "Hey, guys, get together and do this." We have basically this system in some of the uniform vehicle and traffic laws. We need more of that leadership type approach.

Thank you.

[The prepared statement of Dr. Maickel follows:]

WRITTEN TESTIMONY: Roger P. Maickel, Ph.D.
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I have been researching various areas of science that involve the problems of the drug-impaired (including ethyl alcohol as a "drug") motor vehicle operator for more than a decade. When I began this research, the specific role(s) that drugs (other than alcohol) play in the causation of motor vehicle accidents was unknown. More than 10 years later, that role is still unknown! A modest amount of research on drug use and driving has been performed, but it has yielded results that cannot establish that any drug, other than ethyl alcohol, has a definitive risk factor in traffic accidents.

A general review of the situation highlights these points:

- Many drugs impair various driving skills in a variety of testing situations
- Some of these drugs are widely used by the general population, sometimes in combination with ethyl alcohol
- Many people who use drugs also operate motor vehicles
- Some evidence suggests that several drugs may increase the risk of traffic accidents by motor vehicle operators under the influence of these agents

The overall evidence is sufficient to warrant concern for public safety and to stimulate further inquiry, but it is not sufficient to permit careful definition or priority for specific investigation.

1. What specific information is required to define the highway safety risk for any drug in a specific situation?
2. What research needs exist to attain this level of information and to permit development and application of satisfactory countermeasures?

In the case of ethyl alcohol, science has developed a clear-cut answer to the first question. The correlation of blood alcohol concentration (BAC) values with degree of impairment of human performance is without question. However, although science and society are now well-informed, society has not developed effective countermeasures for the drinking driver, in answer to the second question.

Two basic research approaches have surveyed the problem of drugs and driving:

- Prospective experimentation
- Retrospective epidemiology

Each approach has significant advantages and disadvantages.

Prospective experimentation involves laboratory testing (of animals or humans) in a variety of behavioral testing systems, with or without administration of precise amounts of one or more drugs of known purity. This type of research generally yields excellent data that can permit precise correlation of dose or blood level of drug with some quantitative measure of performance.

Retrospective epidemiology involves examination of accident and non-accident driving populations to determine whether the presence of a specific drug or drugs in the blood can be correlated with accident frequency. This research is closer to the actual situation, but involves many technological, pharmacological, and legal constraints. Precise correlations are much more difficult to achieve, even for a drug with a simple chemical structure such as ethyl alcohol.

Both of these research approaches have several problems that must be stated to emphasize the difficulties of using a scientific approach in solving the problem of drug use and motor vehicle operation. In prospective experimentation, no laboratory test system is perfectly correlated with the overall operation of a motor vehicle. The "driving simulator," the motor vehicle

equivalent of the Link trainer in aircraft flight instruction or the lunar module simulator in space training, is not perfect because there is no real "risk" involved.

Other, less complex, behavioral test systems do not involve the overall operation of a motor vehicle, but rather select one to several specific human performances. The only accurate test system to assess the effects of drugs on motor vehicle operation would be to administer a known dose of a specific agent or combination of agents to a number of drivers prior to their driving in a real-life highway situation. Such testing cannot be permitted due to ethical, legal, and moral constraints.

Similarly, an appropriate and valid epidemiological study would require roadblocks or roadside surveys to stop a large number of vehicle drivers randomly to obtain samples of biological fluids (blood, saliva, urine) for drug analysis. Such a program has severe technological constraints, however, and requires massive sums of money. It might also face some serious legal challenges.

One such proposed research effort involved voluntary compliance of drivers to submit urine samples under guaranteed anonymity. The project proposal passed all levels of approval within DOT until it reached the desk of the Secretary of Transportation. That individual was reported to have rejected the proposal, stating "As long as I am Secretary, no American citizen is going to be asked to piss in a bottle." It is obvious that administrative attitudes like this counteract performance of any type of quality research.

A lack of information in reliable and readily available form exists to delineate the nature and magnitude of the drug/driving situation, so what else can be said? One extremely legitimate and valuable point to be made is that society must be better educated, not in terms of formal education, but in terms of real-world, commonsense knowledge.

A striking example is the general understanding of the word "drug." The best definition is:

- A drug is any chemical that, when present in the body, alters one or more biological functions.

This definition is most realistic, since it permits including a number of substances that have significant pharmacological activity. This is especially important considering the coordinated human performance required for safe operation of a motor vehicle.

For example, many housewives and industrial workers are exposed daily to volatile solvents. These solvents may have subtle but deleterious effects on performance in a subsequent driving situation. The solvents belong to the same general pharmacological class as clinical anesthetic agents. In low doses, they produce that state of mental depression experienced as drowsiness. Other "drugs" that have a basically similar effect include: ethyl alcohol, carbon monoxide, and a host of over-the-counter medications for allergies, coughs, colds, and sinus problems. And still similar effects occur from a large variety of prescription drugs, ranging from pain-killers (analgesics) to minor tranquilizers (anxiolytics) and from major tranquilizers (antipsychotics) to anti-ulcer agents.

Consider the scenario of the worker who, on one day in question, takes his morning analgesic tablet (on prescription for a painful, bruised hip), consumes an over-the-counter antihistamine later in the morning (to control a runny nose), has several beers for lunch, works in an atmosphere full of volatile solvents all day, and then drives home in a car that is sufficiently old and poorly maintained that it has a slightly leaking exhaust system. Of course, on this particular day, he drives his carpool of four other workers who are heavy cigarette smokers. The probability of this driver being a

high accident risk is very real. Nevertheless, neither that driver nor society is aware of that high risk!

This scenario points out the greatest single need that exists today. That need is education. That education needs to be a type not amenable to our present public school system and definitely not attainable by billboards, television or radio jingles, spot announcements, or advertising handouts. We, as a society, need to reorganize our approach to the education of the potential as well as the real motor vehicle operator. The federal government should take the lead in such an effort, not because more federal control is needed, but because a standardized, truly national approach is the only one that will be cost- and time-effective.

One simple example illustrates this point. With the organizational capabilities and the large (indeed, huge) volumes of material collected in recent years by DOT subgroups such as NHTSA (National Highway Traffic Safety Administration), it should be relatively easy for the agency to produce a standardized driver education manual for national distribution that includes topics such as drug use and driving risk. This would not distract from private industry or from individual state effort. It would merely demonstrate to them that their own efforts to date have been miserable failures.

This need for education is emphasized by considering the problems involved in development of an appropriate "information package" for other drugs comparable to that presently available for ethyl alcohol. Many persons are familiar with the concept of BAC and with the use of the breathalyzer (or equivalent) apparatus to measure a suspected driver's BAC. In contrast, few people are aware of the cost, labor, and time required to reach this state of knowledge, technology, and legal acceptability.

When one considers that ethyl alcohol is a very simple chemical molecule, with unique characteristics, the background is set for a conservative estimate

of what would be required to develop equivalent information and technology for other drugs. For example, to develop a functional and legally acceptable "information package" for a single drug (such as diazepam/Valium^{R}), including the necessary technology to measure blood levels would require:

- A total time span of 4 to 6 years
- From 12 to 15 man years of professional effort
- From $20 to $25 million of support

Obviously this is not practical, since diazepam is only one of more than 400 drugs that can be readily identified as likely candidates for such research effort.

A need that may be placed as second in line, behind that of education, is the development of technology that can be utilized to characterize the motor vehicle operator who is "impaired," that is, the driver who might be called "drunk" if the BAC were in excess of 0.08 or 0.10. Despite the degree of sophistication that we have reached with regard to testing apparatus and procedures, we do not yet have any "system" that could be used for determining whether a given driver of a motor vehicle is, in fact, capable of safely operating that motor vehicle. Such a test technology, if portable, easily used, relatively inexpensive, and scientifically effective, could well be the ultimate answer to the nation's problems of dealing with the identification and arrest of the "impaired" driver — whatever the reason!

As with any welcome idea such as this, there remains at least one major fly in the ointment. In this case, there are at least two. First of all, such an apparatus would have to be designed, proved, and extensively field-tested. This is presumably not an insurmountable task; it would require only some time and a relatively modest (compared to the sums quoted above for a single drug) amount of money. The more difficult task would be to gain legal acceptance of such a procedure/technology in the courts. Given the current

psychological/mental set of our legal system, the difficulties that can be foreseen are little short of enormous. Questions would be raised regarding fairness and equality; bilingual instructions might be required, and serious challenges would be posed regarding the level of education needed to "comprehend" what is required for testing. A personal and professional bias is that such a system could well be included in the basic examination presented as a requirement for obtaining the license to operate a motor vehicle. However, for an event such as this to become an acceptable procedure on a national basis would definitely require support from the federal government. Nevertheless, it must be considered as a viable procedure; it would eliminate the variable to whether the drug involved was ethyl alcohol or marijuana, or caffeine. The measurement would be merely that of "impairment of the ability to safely operate a motor vehicle."

One final point needs to be addressed. Speaking as a scientist (who has been trained in careful, factual analysis of a situation), a driver (who has seen many thousands of unsafe motor vehicle operations, and who has not been the cause of a single accident in 25 years), and a citizen (who is concerned with our carnage on the highways), I feel that the most urgent need for this nation at the moment is for a national acceptance of the fact that the operation of a motor vehicle on the public thoroughfare is a PRIVILEGE and is not a right! A feel that transgressions of various motor vehicle laws and regulations should be punished, not by extensive court trials and litigations, but by automatic and mandatory sanctions such as revocations of that license, labeling of the vehicle, and/or fines or jail sentences. A multi-ton motor vehicle is more lethal than a firearm; the operator must be made to realize this! Fifty thousand fatalities a year are too many lives to be considered as a minor problem.

Senator HUMPHREY. Thank you, Dr. Maickel.

Senator Pell, would you like to go first with questions? I have to be here anyway.

Senator PELL. Thank you very much indeed, Mr. Chairman.

There is one question that bugs me, and this is the question that was touched on by the last panelists; that is, the question of the measurement of impairment and how many of the impaired drivers on the road come from alcohol and how many come from other causes.

Do any of you have a view in this regard? When we say that on the road on Friday and Saturday nights, 1 out of 10 cars is driven by a drunk driver, do we have any idea how many cars are driven by drugged drivers, or is there any way of estimating that?

Dr. MCBAY. There have been studies made. What is done is if they blow less than 0.10 percent—they have been arrested for driving under the influence of something; probably, they blow less than 0.10 percent. If you take that group and look at those that show impairment at concentrations less than that, all kinds of figures are quoted, but that is a rather selected and biased population.

What you would like to know and I would like to know and I think everybody would like to know is how many people are out there, period, not ones arrested for——

Senator PELL. How many people are what?

Dr. MCBAY. Are out there with drugs in them.

Senator PELL. Right.

Dr. MCBAY. That is what you have to discover and I do not believe, under the present laws of this country and any State, that you are going to find any easy way. A roadside survey was suggested in the DOT recommendation to the Congress a few years back. You are not going to find any easy way of stopping drivers and then presenting them something saying, "Your human rights are protected, but we will just draw some blood from you and then if everything is all right you can go."

The problem with it is you draw blood from them and they go on, and you run a breath alcohol and there is no alcohol. They go down the road and have a crash and later on you find their blood is loaded with some drug. You have a civil responsibility.

Of course, I do not know how many American people, would participate in such a survey, not under the present laws and under the Constitution.

Dr. MAICKEL. There is a related aspect to this I would like to add. The State of Indiana—I have to put in a plug for my own State—has just started, through the Indiana State police, a program of exactly that—random roadblocks. The only thing they are looking for is alcohol. But the first major one of these in the Indianapolis-Marion County area netted almost 20 percent of the some 800 drivers stopped as having alcohol or related impairment. I have not seen the details of what they meant by "related impairment." That would be 2 out of 10.

Senator PELL. I think that would be a very interesting result. When you do have it, I hope you will submit that to this committee, or the staff of the committee will get it.

Dr. MAICKEL. Well, Senator Quayle is on the committee, so he can presumably get those.

Senator PELL. Who?

Dr. MAICKEL. Senator Quayle can presumably get those very easily.

Senator PELL. Do you have any thoughts?

Ms. MANN. There is a new, noninvasive device for testing recent use of marihuana. This was developed by Dr. Stanley Gross of UCLA. It can have useful application because it can test for recent marihuana use, within the past 3 hours.

You blow into a small plastic tube which has material that traps the THC. The tube is then taken to a laboratory where the material containing the trapped THC is analyzed by RIA (radioimmunoassay), which is a method used routinely in clinical laboratories to analyze drugs, hormones, et cetera.

People might not like to give blood, as you say, or urine, but if they fail the roadside dexterity test, I should think it would be much easier to get laws passed saying that they have to blow into a tube, or spit into a tube—because the THC can also be trapped in saliva—and then analyzed by RIA. Thus the police could have two standard devices, one for alcohol and one for marihuana.

Senator PELL. That would only help if there was marihuana involved. It would not help if somebody had heroin involved.

Ms. MANN. That is true, but there is one other helpful aspect which has not been mentioned and I would like to mention it. It is such a simple aspect, but nobody talks about it, and this is getting what information we have—and we do have some substantial information on marihuana impairment—out to the general public.

Now, the fact that this can work is indicated by what has happened in the National High School Senior Survey which, as you know, is the only national survey done every year on drug abuse. It only tests the high school seniors and it does not test those who have not made it to the 12th grade because of their drug abuse, and it does not test those who were absent on the day that the researchers came. As we know, truancy is a big byproduct of drug abuse. But it is the most accurate annual national survey we have, and it has shown that daily marihuana use has gone down among 12th graders and the researchers say that the kids tell them the reason it has gone down is because they have been reading in the media, mostly in the magazines, that marihuana is bad for you. So getting out information can achieve results!

However, many of the perceptions about marihuana and driving are so totally wrong out there. For example, Hugh Alcott, who is the project manager of the California Department of Corrections, the special narcotics section, deals with some 5,000 drug-abusing adults a year. He said a lot of people who have had too much to drink and know their driving will be affected, smoke a joint so that they can drive better. They actually think that the marihuana undoes the effects of the alcohol!

Kids often say, "I drive better stoned." Passengers often say, "I would never drive with anyone who is drunk, but I would drive with somebody who is stoned because they drive safer." These are total misconceptions. There is such a thing as behavioral toxicity which does not apply to alcohol but which does apply to marihuana. This means if you, in your stoned state, are driving along the highway thinking to yourself, "I drive much better stoned," this

perception holds over so that when you are, so to speak, sober and not under the influence of marihuana, you still think you drive better stoned. So, the next time you get behind a wheel, you can light up and say, "Well, I drive better stoned."

If information was gotten out—and there have been, as I said, 50 scientific studies which clearly show the marihuana-driving impairments—I think that this would have a tremendous beneficial effect among people who are under the total misconception that they drive better stoned or that marihuana does not impair their driving.

Senator PELL. Thank you. Well, I guess the real problem here is still alcohol. There are other drugs involved. If we can get a real handle—and I think our legislation can help in this regard—on alcohol, then this will be the nose of the camel under the tent in a pretty big way and we may be able to move into these other areas.

I think what you have done today is very useful in alerting us to the problems around alcohol; that alcohol is not the only drug, but the main one. And I do hope that we will keep our eye on that essential ball and get that problem licked, or try to, and then see where we go from there.

I thank you very much and I congratulate you again on this hearing, Mr. Chairman.

Dr. MCBAY. Senator, could I make a very short, one-sentence statement?

Senator HUMPHREY. Yes, if it is short.

Dr. MCBAY. We have nothing really to combat the drugged driver on the road, we say. Going back to when we could not test alcohol, people were arrested for driving under the influence because they drove erratically, they may have had the smell of alcohol on their breath, and other things.

There is no reason in most States where we cannot arrest a person for reckless driving, and if they want to tell the judge they were driving wrecklessly because they were smoking pot rather than alcohol, I can tell them what their sentence might be in most States.

In other words, we have the tool; let us not remove that tool, because this is what this is all about. You are not supposed to interrupt a driver who is driving respectfully. You are supposed to stop a driver making turns erratically, going over the line, or whatever else indicates this impairment.

This man should be arrested, and let the courts believe him with or without that kind of evidence. We have switched the thing around. I actually make determinations. We have got to make a determination to make the case look good.

We can still go back to that old rule. If the person is driving erratically, arrest him. If you are doing 60 miles an hour in a 40-mile-an-hour zone, the judge is not too interested in why you are driving that fast. You are still guilty.

Senator HUMPHREY. Fine. I think everyone will concede that drinking and driving is the major problem, but I am uneasy that perhaps an impression has been left that the problem of drugged driving is insignificant. That was not your intent, Dr. McBay, is that correct? You did not mean to give that impression?

Dr. MCBAY. It is not significant compared to alcohol.

Senator HUMPHREY. Yes, in comparison; I think everyone realizes that.

Dr. MCBAY. One death is significant.

Senator HUMPHREY. Of course.

You also stated or implied that there is not yet a sufficient body of scientific evidence to indicate that use of drugs has an effect on driving. Is that your feeling, that there is not yet a sufficient body of evidence?

Dr. MCBAY. I feel there is not, but I cannot testify that I can cite any good experiment that indicates drugs affect driving. Now, if you want to take anybody—I can give a person enough aspirin so that I can either kill them or put them in a coma.

Senator HUMPHREY. Yes, right.

Dr. MCBAY. Therefore, you could state that, but I am just saying medical or scientific evidence.

Senator HUMPHREY. What efforts have you made to find out whatever scientific information is available? Let me put it this way: What resources are available to someone in your professional capacity to have access to these kinds of studies? Are they readily available? Are people aware of them?

Dr. MCBAY. Yes. I serve as a reviewer on three or four journals that are very well known. I have attended workshops ad infinitum, I think. I am on the section of NIDA for drunken driving. I think everything that is done and some things that are not reported that people will not let me talk about that are being done, because they are not complete, I am even aware of that. I think I am pretty well aware of what is going on in not only this country but in greater parts of the world, and more is going on here than elsewhere in the world; there is no question about it.

Senator HUMPHREY. Mrs. Mann, you mentioned that there have been some 50 scientific studies, did you not, of the effects of marihuana on driving skills.

Mrs. MANN. I did. I was just going to ask Dr. McBay what he thinks, for example, of Dr. Moskowitz' studies, which I understand are very highly regarded by everybody. All of the recent studies of Dr. Moskowitz show impairment which can be equal to impairment caused by alcohol; although not always in the same type of impairment.

I have read many other studies, and they go back in years, that marihuana—that is what I am particularly interested in—is extremely impairing. So, I would like to ask Dr. McBay what he——

Senator HUMPHREY. Well, I think we had better avoid witnesses asking each other questions.

Mrs. MANN. I will ask him afterward.

Senator HUMPHREY. It is remarkable, the difference in opinion, between you and Dr. McBay. You feel that there is now a sufficient body of scientific opinion and evidence and studies to indicate that mixing of drugs with driving is a dangerous practice?

Mrs. MANN. I believe there is a sufficient body on marihuana impairment.

Senator HUMPHREY. On marihuana.

Mrs. MANN. I also believe, as I indicated, that it would not be that expensive to do initial types of studies on other drugs using closed-course driving—after all, Sutton did his for less than $3,000.

This particular type of initial study, which at least is enough to get warnings out to the public, can be done by researchers. You can do one for quaaludes and one for a variety of other drugs.

I think it is defeatist to say it would cost $25 million, so we cannot do it. I think we have to do it. As has been indicated, if one life is saved by one person reading that they should not take a Quaalude before driving or while driving, who can put a price tag on that?

Senator HUMPHREY. Dr. McBay, you spoke of a study done in North Carolina, and I think I heard you say that had it been done in some other locale, perhaps the outcome would have been different; for instance, a big city.

Dr. MCBAY. That is supposition. I have no way of proving that, since it has not been done elsewhere. It has been done in Toronto, Canada, and the results are not different. I cannot get into all of the details of the study. There are problems with our study and problems with theirs, so it is very hard to evaluate in a few words. I had to give a scientific evaluation, and that is my opinion based upon what I have seen.

Senator HUMPHREY. Mrs. Mann, you have been associated with volunteer groups. How do you explain their success with relatively modest budgets while some bureaucracies have been working on these problems for years with little lasting effect?

Mrs. MANN. Well, I think one reason may be that some of the bureaucracies' mandates just go so far, and they are usually research studies or experimental; for example, the ASAP program which I think cost the Government $88 million. They did a fine job so far as they went, but it had no effect on driving fatalities because they could not look into, for example, judges who were giving too lenient sentences, and the idea of plea bargaining, which local groups which are not under such strictures can do, and this is one of the most valuable things. The Government groups cannot perhaps lobby for changes in legislation, and so forth.

Also, about half the people involved in these local groups—MADD and RID—are involved for the most tragic reason that they have had a loved one killed. Now, I would like to say something about the other half, if I may, briefly. There is a tremendous drop-out rate among the other half because of lack of funding.

It is very romantic to talk about volunteerism. But people who do not have this pressure which will keep them going through anything—making up for the death of a loved one in a traffic crash—well, there is no reason that this "other half" should keep paying out their own money for Xeroxing and for meeting halls and driving to schools to give talks to the kids. They just cannot afford it. And they are dropping out. But they are needed, desperately.

If some way could be found even to repay expenses to groups or individuals who have a proven track record, I think this would do a tremendous service to these volunteer groups which have been mentioned before as being the prime movers in getting the war against the drunk driving epidemic off the ground.

Senator HUMPHREY. Dr. Maickel, you stated in your testimony that the testing devices and procedures available today are not sufficiently accurate or sensitive to indicate the recency of use. We do have procedures and devices that indicate use, but just not how

recent it is or whether it is recent enough to affect driving performance. Is that what you were saying?

Dr. MAICKEL. Right. The basic analogy is the breathalyzer, which is the standard for alcohol testing.

Senator HUMPHREY. Yes.

Dr. MAICKEL. If you blow a breathalyzer level above 0.1, you can clearly categorize the degree of impairment.

Senator HUMPHREY. Right.

Dr. MAICKEL. If I go out and measure the urine of someone who is driving down North Capitol Street and find a urine level of 0.2836 micrograms per liter of metabolite of tetrahydrocannabinol, the active ingredient in marihuana, I know absolutely nothing about how impaired or how nonimpaired that individual might be, and that is the crux of the problem.

Senator HUMPHREY. Yes.

Dr. MAICKEL. And to do that and to put together, as I say, an information package that would stand up to the tests of the legal system would be a horrendously expensive proposition.

Senator HUMPHREY. Well, you have a novel idea in requiring some standard test of performance, but what do you envision happening after a driver is selected by having failed this test? What is the next step?

Dr. MAICKEL. Well, here is where I would like to see our State laws modified to take the driving aspect out of the courts, basically. The operator's license is a privilege; it is not a constitutionally-guaranteed right. And I believe that for such things as driving while impaired—I am not talking about parking in a loading zone, but a sufficiently serious abuse of that privilege should garnish upon the owner an automatic sanction. And unless he or she wants to challenge that through the court system, that sanction would be applied—a suspension period, a labeling of the car, "I am a drunk driver," or something like that.

If I may, Senator, I would like to comment on this disagreement between Mrs. Mann and Dr. McBay.

Senator HUMPHREY. Sure; you might as well.

Dr. MAICKEL. I think one of the points that is in my written statement is relevant to this. There is a lot of data that would indicate that amphetamines, barbiturates, analgesics, you name it, will impair the type of human behavioral performance that is involved in operation of a motor vehicle.

What is missing—and this is, I think, what Dr. McBay is addressing—are the retrospective epidemiological studies showing that in 20 percent of the fatality drivers, there was a sufficient level of drugs to have caused impairment, because we have got those two things.

Senator HUMPHREY. Yes.

Dr. MAICKEL. However, I would comment, with regard to simple studies saying quaaludes impair driving, that it might be worthwhile for this subcommittee to include in their list of materials—I am sorry I did not put it in my testimony—a copy of the statement that, for example, is on every package of over-the-counter cold tablets sold in this country:

> Warning: the driver should not use these tablets if you are going to be driving a motor vehicle or operating heavy machinery.

It is there, but it is ignored.

Senator HUMPHREY. All right, just a couple of more quick questions and then we must go on to our next witness. Going back again to that performance test you suggested, suppose a police officer finds someone who fails this test. Then what happens next?

Dr. MAICKEL. Presumably, they would go through the same process that they now go through if the police officer finds they fail the breathalyzer test on the highway; that is, they would be booked into the system, except that I would treat this not—assuming that nothing else had happened, no vehicular homicide case and the individual was just driving down the highway, weaving, and the police officer pulls him over, I would treat it not as a criminal citation but as a sanction against the driving privilege. In other words, get that part of it out of the criminal law system so we do not have these cases piling up on judges.

Senator HUMPHREY. But at that point, the person would be subjected to blood tests?

Dr. MAICKEL. I would argue that if we have the optimal behavioral impairment test, I do not care whether their impairment is because they are drowsy from lack of sleep. They are still as much of a hazard to the other driver on the highway, and therefore they have impaired their privilege.

Senator HUMPHREY. But are you suggesting that at that point it be determined through further testing what the cause of that impairment is?

Dr. MAICKEL. It would be nice if we could do it, but I am not willing to press upon any government, Federal or State, to supply the necessary dollars to do that.

Senator HUMPHREY. I see. So, if you fail the test——.

Dr. MAICKEL. If you fail the test, you take the sanction. If you want to challenge it, fine.

Senator HUMPHREY. Mrs. Mann, in your testimony you talked about studies that evidence an adverse effect on driving skills from the use of drugs. I presume most of that is marihuana research, is that correct?

Mrs. MANN. Right, and it was not just behavioral. That is what I would like to ask Dr. Maickel—why he said that. These were specific.

Senator HUMPHREY. Is recency of use critical to these studies or are there certain long-lasting, cumulative effects of marihuana that would affect driving skills no matter how recent?

Mrs. MANN. Well, there have been studies which show that driving skills are impaired 4 to 5 hours after use, and there are lesser impairments which show 24 hours after use. But the studies that I list in my articles and in my book were done as controlled studies. The scientists gave them NIDA marihuana; they were done after use.

As you know, there are devices out—pot pipes, and so forth—enabling you to smoke marihuana while driving. The pot pipe is attached to the dashboard and you have a hose leading to your mouth and another hose leading to the mouth of your date, should she want to smoke too. Driving while smoking pot is a critical problem.

Senator HUMPHREY. Are there any estimates arising out of these studies of how many drivers are affected, let us say, by marihuana at a given time?

Mrs. MANN. Well, the large, almost statewide study in California, as I said, showed that 24 percent of the ramdom sampling of drivers who had no alcohol in their blood but who did have marihuana metabolizes in their blood were sufficiently impaired to be stopped and arrested for driving under the influence. That is the largest study that I know about of that type of DUI.

Senator HUMPHREY. All right. There are a number of other questions we could ask. We do not want to keep our other witnesses waiting. Thank you all very much for your testimony and your help here this morning.

I will divert from the published arrangements here today so that Governor King can offer his testimony. He has been waiting for some time and must leave, so we will ask Governor Edward King of Massachusetts to come forward at this time.

Thank you for coming, Governor King. We are privileged to have you with us this morning and are anxious to learn about your program which you initiated in Massachusetts to address this serious problem.

STATEMENT OF HON. EDWARD J. KING, GOVERNOR, COMMONWEALTH OF MASSACHUSETTS

Governor KING. Thank you, Senator. I am sorry I was a moment or two late there; I was trying to complete some business for the Commonwealth.

Senator HUMPHREY. As long as it was not politics.

Governor KING. As Governor of the Commonwealth, it is indeed a privilege for me to be here today to discuss the initiatives that Massachusetts has undertaken to cope with the enormous problem of drinking and driving in our State.

To begin with, we want to applaud you and thank you for holding this timely fact-finding hearing on a significant national problem. Drunk driving is a complex problem, and I do not profess to have all of the answers. Today, I would like to speak to you about the Massachusetts experience with the drunk driver.

When I took office in 1979, one of my first initiatives was to fulfill a campaign promise to raise the drinking age. As this chart vividly shows, Massachusetts had a yearly average of 106 young drivers involved in alcohol-related fatal accidents for each year between April 1974 and March 1979. The drinking age was then 18.

However, since raising the drinking age, fatalities have declined; 54 young drivers were killed in alcohol-related car accidents between April 1, 1981 and March 1982. This represents almost a 50-percent reduction in fatalities for young people between the ages of 15 and 19 years.

We have also been successful in expanding the implied consent law to include a blood test taken at an emergency medical center. Should the driver refuse the officer's request for a blood test, suspension of license will result, just the same as for declining a breathalyzer test—automatic, 90-day loss of license.

Additionally, we have set aside funding for selective enforcement teams in an effort to get drunk drivers off our roads. Yesterday, after 10 months of work, I received legislation drafted with the full support and cooperation of the Massachusetts Legislature which comprehensively addresses this issue.

I applaud our legislature's actions on behalf of the citizens of the Commonwealth, for we now have what will be a very effective anti-drunk driving law—a leader, we believe, in the Nation.

This new legislation addresses four fundamentals: First, the necessity of providing for a certain punishment for offenders; second, the necessity of providing for greater law enforcement presence which increases the perceived risk of apprehension; third, the necessity of providing an incentive for rehabilitation of offenders; and fourth, the necessity of funding more high-quality educational programs to address the problems of alcohol and alcohol abuse.

This legislation provides minimum, mandatory jail sentences for second and subsequent offenses for drinking and driving and for those who commit vehicular homicide while driving under the influence of alcohol. That is on the first offense—a minimum of 1 year.

While there are no mandatory jail terms for first offenders in a nonfatal accident, we now have strict laws for repeat offenders, including the minimum mandatory sentence mentioned. Jail is not precluded on the first offense. The judge may sentence a person to jail, but it is not mandatory except in the case of a homicide.

The second-time offender will be subject to a 7-day mandatory jail term or 14-day confinement in a minimum security facility described as a rehabilitation facility. Third and subsequent offenders will face a 60-day mandatory minimum jail term. This mandatory minimum sentence assumes that certain punishment will act as a deterrent and provide a shock effect for offenders so that they may begin to recognize the extent of their own problem.

All offenders are subject to a mandatory loss of their license. The loss of license ranges from 30 days on a first offense to 5 years for subsequent offenses. A first offender may lose his license for up to a year but may have that period reduced by entering an alcoholic safety action program. The minimum, however, is a 30-day loss of license.

The intent of this program is to provide an incentive for rehabilitation. The $400 cost of this program is borne by the offender; $250 of this is used to pay for the actual program, and $150 is placed in a special alcohol countermeasures fund.

Since 1980, I have provided funding through my highway safety bureau for special, selective enforcement teams of State and metropolitan police. These teams patrol on weekends, at late-night hours, and in areas and on roads where reported accidents have occurred. This, of course, is to keep the drunk driver off the road.

The success of these teams has been noteworthy. A report by the Massachusetts State Police shows a 39-percent decrease in the total number of fatalities from October 1979 to October 1981.

Statewide, the arrests per 100 motorists for alcohol-related accidents has increased 2½ times in this time period, and with the success of this program, we expanded our efforts further in 1981 and provided additional funding for selected local police patrols.

Massachusetts was also selected—1 of 10 city, town, county, or State bodies—by the Department of Transportation to participate in a special program designed to get drunk drivers off our highways. According to DOT, we were selected because most of the basic elements required for a drunk driver control system are already in place.

I want to compliment here our secretary of public safety, George Luciano, who is sitting over there on my left and forward, and our great and general court which has been so helpful in bringing about some of these changes and funding.

The highway safety bureau funding also addresses the drunk driving problem through educational programs. One innovative program which began in Massachusetts, of which I am privileged to serve as honorary chairman—I have the button right here—SADD, students against driving drunk. I have asked Carl Olsen, who is sitting right there, who is the student president of SADD, to join me here today at this important Senate hearing.

Mr. Robert Anastas, who I believe is going to testify a little later, a Massachusetts teacher of the SADD course; he is also here to testify.

This program came to my attention when the group came in for a gubernatorial proclamation citing the work that they have done. And in going through the process and asking some questions, I thought it was a particularly good idea, and asked them if they would be willing to help others. As a result, I believe we now have over 200 of the high school systems of our 351 cities and towns with groups of students committed to combat the problem of which they are a significant part themselves.

Senator, we have provided brochures on this program for each of the committee members. The goals of SADD are clearly enumerated in the brochure. In summary, SADD is a vehicle that provides grassroots education and peer group support on the problem of drinking and driving.

The consumption of alcoholic beverages, coupled with the operation of a motor vehicle, clearly represents a deadly combination. This problem is further aggravated with teenagers because of their inexperience with both alcohol consumption and motor vehicle operation. Nationally, nearly half of all deaths in the 16- to 19-year-old age group are the result of motor vehicle accidents.

We repeat for emphasis that having a large part of the problem band together, such as teenage students as in the SADD program to combat the problem, is the best possible type of help.

Senator, we urge each member of your committee to consider implementing a national program, such as students against driving drunk, which will serve to educate our youth about the perils of drunk driving. I am aware that New Hampshire already has such a program, and we are also aware of recent Senate actions on drunk driving and we compliment that honorable body on that.

I also feel that the language incorporated in the 1982 Federal Highway Act, which also provides incentive grants, is highly desirable. The problem of drunk driving is growing nationwide. Massachusetts is in the forefront of the Nation in the fight to get the drunk driver off the road. We are happy to share our successful experience with you, and will be prompt to initiate any action to im-

plement any ideas coming from this forum or others which will help our people live and travel with additional safety.

Summing up, what we have done, starting in 1979, was to raise the drinking age; passed an implied consent law to catch those who would claim an injury and go to a hospital instead of taking the breathalyzer test. We have supported in every way we can the initiative of the students' group, SADD. We have our mandatory sentences.

We also have mandatory sentences for those who, as a result of a drunk driving offense, lose their license and are caught driving after their license is revoked and before it is restored—mandatory sentences for that. We have been strong in funding our highway education.

Finally, we believe that the public attention that this forum is creating, that SADD creates for us in Massachusetts, and that the mandatory legislation created has students talking to one other about the seriousness of the matter. It has students talking to their older brothers and sisters and parents, and certainly has parents talking to their children and others of their same age.

All in all, with the help of the media, we believe that we are focusing on a problem which is showing improvement but on which much remains to be done.

[The prepared statement of Governor King follows.]

PREPARED STATEMENT OF GOV. EDWARD J. KING, COMMONWEALTH OF MASSACHUSETTS

Chairman Humphrey and distinguished members of the Senate Subcommittee on Alcoholism and Drug Abuse.

As Governor of the Commonwealth of Massachusetts, it is indeed a privilege for me to appear before you to discuss the initiatives that Massachusetts has undertaken to cope with the enormous problem of drinking and driving in our State.

To begin with, I would like to applaud you for holding this timely fact finding hearing on a significant national problem.

Drunk driving is a complex problem and I do not profess to have all the answers. Today I would like to speak to you about the Massachusetts experience with the drunk driver.

When I took office in 1979 one of my first initiatives was to fulfill a campaign promise to raise the drinking age.

As this chart vividly shows, Massachusetts had a yearly average of 106 young drivers involved in alcohol related fatal accidents for each year between April 1974 and March 1979.

However, since raising the drinking age, fatalities have declined to an average of 5.4 each year; 54 young drivers were killed in alcohol related car accidents between April 1981 and March 1982. This represents a 49.1 percent reduction in fatalities for young people between 15–19 years of age.

We have also been successful in expanding the implied consent law to include a blood test taken at an emergency medical center or a breathalyzer test. Should the driver refuse the officer's request, suspension of license will result. Additionally, we have set aside funding for selective enforcement teams in an effort to get drunk drivers off our roads.

Yesterday, after 10 months of work, I received legislation drafted with the full support and cooperation of the Massachusetts Legislature which comprehensively addresses this issue.

I applaud our legislature's actions on behalf of the citizens of the Commonwealth, for we now have one of the toughest drunk driving laws in the Nation. Our new legislation addresses four fundamental principles:

First, the necessity of providing for a certain punishment for offenders.

Second, the necessity of providing for greater law enforcement presence which increases the perceived risk of apprehension.

Third, the necessity of providing an incentive for rehabilitation of offenders, and

Fourth, the necessity of funding more high quality educational programs to address the problems of alcohol and alcohol abuse.

This legislation provides minimum mandatory sentences for second and subsequent offenses. For drinking and driving, and for those who commit vehicular homocide while driving under the influence of alcohol.

While there are no jail terms for first offenders, we now have strict laws for repeat offenders, including minimum mandatory sentencing.

The second time offender will be subject to a 7-day mandatory jail term while third and subsequent offenders will face a 60-day mandatory jail term. This mandatory minimum sentence assumes that certain punishment will act as a deterrent and provide a "shock effect" for offenders so that they may begin to recognize the extent of their problem.

All offenders are subject to a mandatory loss of their license, ranging from 1 year for a first offender, to 5 years for a third and subsequent offender.

However, a first offender may reduce the period of license suspension by entering an alcohol safety action program. The intent of this program is to provide an incentive for rehabilitation. The $400 cost of this program is borne by the offender; $200 is used to pay for the actual program and $200 is placed in a special alcohol countermeasures fund.

The proceeds from this fund will provide for additional law enforcement measures as well as increased educational programs. The law enforcement measures will increase the perceived risk of apprehension.

I have also provided funding through the Governor's highway safety bureau, for special selective enforcement teams of State and metropolitan police. These teams patrol on weekends at the late night hours, to keep the drunk driver off the road. The success of these teams has been noteworthy. A report by the Massachusetts State Police shows a 39 percent decrease in the total number of fatalities from October 1979 to October 1981.

Statewide, the arrest rate per 100 motorists for alcohol related incidents increased from .2870 in 1970, to .7427 in 1980. With the success of this program we expanded our efforts in 1981 and provided funding for selected local police patrols.

Massachusetts was also selected by the Department of Transportation to participate in special programs designed to get drunk drivers off the highways. According to D.O.T., we were selected because most of the basic elements required for a drunk driver control system are already in place.

The highway safety bureau funding also addresses the drunk driving problem through educational programs. One innovative program which began in Massachusetts, of which I am privileged to serve as honorary chairman, is S.A.D.D.—Students Against Driving Drunk.

I asked Carl Olsen, student president of S.A.D.D., to join me here today at this important Senate hearing.

Robert Anastas, a Wayland, Massachusetts teacher of the S.A.D.D. course, is also here today to testify in depth about this program.

Mr. Chairman, I have provided brochures on this program for each of your committee members. The goals of S.A.D.D. are clearly enumerated in this brochure. In summary, S.A.D.D. is a vehicle that provides grass roots education and peer group support focusing on the problem of drinking and driving.

The consumption of alcoholic beverages coupled with the operation of a motor vehicle, clearly represents a deadly combination. This problem is further aggravated with teenagers because of their inexperience with both alcohol consumption and motor vehicle operations. Nationally, nearly half of all deaths in the 16–19 year old age group are the result of motor vehicle accidents.

Mr. Chairman, I urge each member of your committee to consider implementing a national program such as students against driving drunk which will serve to educate our youth about the perils of drunk driving. I am aware, Mr. Chairman, that New Hampshire already has such a program.

In closing, I am aware that on May 12th, the Senate unanimously passed S. 2158 sponsored by Senator Danforth and Senator Pell and reported out of the Senate Commerce, Science and Transportation Committee. This bill encourages States to provide for:

1. Suspension of driver's license for at least 90 days for the first drunk driving incident, and a one-year minimum suspension for all future incidents.

2. Minimum 48-hour (consecutive) jail terms for any driver convicted of a second or subsequent drunk driving offense within five years of first incident.

3. A 90-day impoundment of any vehicle driven by an individual whose license has been suspended for drunk driving.

I support the idea that any State which adopts stricter drunk driving provisions receive a grant double the amount of its highway safety allocation for such grants. However, I feel that specifying rigid time periods for suspension or revocation of

driver's license by the Congress may be a disincentive for State and local governments to work together to formulate legislation that fits their needs.

I feel the language incorporated in the 1982 Federal Highway Act which also provides incentive grants may be more desirable.

The problem of drunk driving is growing nationwide. Massachusetts is in the forefront of the Nation in the fight to get the drunk driver off the road.

I hope that my comments today have been useful and if you have any questions I would be happy to answer them.

Thank you.

Average number of drivers involved in alcohol related fatal accidents when the legal drinking age was 18 years (15–19 year age group). April 1974–March 1979, 106 per year.

Number of drivers involved in alcohol related fatal accidents. (15–19 year age group). April 1981–March 1982, 54 per year.

Percent change, —49.1 percent.

Senator HUMPHREY. Thank you, Governor King. I certainly admire your firm approach to this problem. I am sure you are going to succeed. I wish you well.

I understand the Governor is going to have to leave shortly. Is that correct, Governor King?

Governor KING. I would be glad to answer any questions.

Senator HUMPHREY. Senator Pell?

Senator PELL. Thank you very much, Mr. Chairman, and thank you, Governor, because I know how pressed you are for time and other responsibilities of being here. I congratulate you on the law you have in Massachusetts; it is an excellent law.

Under the bill that Senator Danforth and I have introduced, which has passed the Senate, Massachusetts, as you know, would be most eligible within its framework. On balance, I gather from your testimony that you would be supportive of our legislation, although obviously there could be changes and improvements, but more supportive than not. Would that be correct?

Governor KING. Absolutely right. Mandatory sentences are contained, loss of license, education.

Senator PELL. I thank you very much indeed and wish you well.

Governor KING. Thank you, Senator.

Senator HUMPHREY. Thank you, Governor King.

Governor KING. Thank you.

Senator HUMPHREY. We will now have our third panel, comprised of Mr. Robert Anastas, executive director of Students Against Driving Drunk; Charles Short, chairman of the Montgomery County task force; and John Bland, Director of the Maryland Alcohol Control Administration.

Thank you for your patience. We do not serve lunch here, unfortunately, but we are going to press on. Why do we not begin from your left with Mr. Anastas and ask you each for your statements and then we will go to questions?

STATEMENT OF ROBERT ANASTAS, EXECUTIVE DIRECTOR, STUDENTS AGAINST DRIVING DRUNK; CHARLES L. SHORT, CHAIRMAN, AD HOC TASK FORCE ON DRINKING AND DRIVING, MONTGOMERY COUNTY, MD.; AND JOHN BLAND, DIRECTOR, MARYLAND ALCOHOLISM CONTROL ADMINISTRATION

Mr. ANASTAS. Mr. Chairman, members of the Subcommittee on Alcoholism and Drug Abuse, the world of the happy is quite different from the world of the unhappy. What, then, is the world of the

unhappy victims of drug abuse? How do they see their world, themselves and their lives?

I raise the question of the relationship between the drug culture and society at-large because in whatever way the drug culture differs from the encompassing culture, it must be continuous with it, sustained by it, and perhaps to a significant degree engendered by it.

Generations have passed since Henry David Thoreau declared that if a man is out of step with his fellows, it may be that he hears a different drummer and let him step to the drummer he hears. Thoreau is probably more widely influential today than he was in his own time; particularly is he influential amongst those who experience themselves as alienated from society—alienated either because, as in the case of the young, they have not been able to feel themselves at home in this world, or alienated as in the case of the blacks and others on the fringe of our society. They have not been allowed to make themselves at home in this world.

The social problem facing our young people today, in my opinion, lies in the emptiness and the dishonesty of so many of the norms that society imposes on the individual. I believe it is important that because our norms have been empty in a substantive, human way, attempts have been made to fill this void with dangerous delusions.

The young people of today are a TV generation. They have been exposed to TV from earliest childhood. Through TV and other media and dimensions of experience, they have absorbed the widespread belief characteristic of our society—a belief in what I call the magic of ingestion; the belief that if we take in the right things—the right pill, the right brand of cigarettes, the right beer, and if we use the right lotions, eat the right food, and I do not know what all else, and if we take in the appropriate substances, all will be well with us.

I believe that we must recognize that for most of our young, life in our own time frame is far from meaningful. It is instead a deadening routine of empty operations carried on for ends that are, at best, trivial and, at worst, destructive of everything decent and dignified to man.

Socrates once said the unexamined life is not worth living. Today, the young say the unlived life is not worth examining and that life today is to be valued only in the richness of feeling that is to be found in it at that exact moment in which love and life are fulfilled—one instant in which time somehow is replaced by eternity, all truths are unfolded, and all aspirations brought to achievement.

Our children have not been viewing the real world. The mass of confusion that surrounds them does not allow them to see the real world. I am shocked and very disturbed, as all of you are here, at facts dealing with adolescence. When we read that the No. 1 cause of death amongst our young 16 to 24 is auto accidents from drinking and driving and that the number two cause of death amongst our young is suicide, loneliness, it seems, is the national symptom and the children are crying out to us for help, so let us begin.

By a wide margin, the major public health problem for teenagers in the United States is injuries associated with motor vehicle use. The enormity of the issue is thus summed in a new research study

by the Institute of Highway Safety. Warnings of the sometimes tragic combination of a teenage driver and an automobile are common. But the real story goes beyond that.

Starting at the age of 13, motor vehicle passenger death rates per capita climb sharply compared to passengers of other ages. Motor vehicle-related fatalities are suffered by teenagers at more than twice the rate that would be expected on a population basis. According to one institute study, more than 7,000 teenagers lost their lives in passenger car crashes in 1978.

Ours is a drinking society. We drink alcoholic beverages many times, at many places for many reasons. Findings of a national survey of junior and senior high school students indicate that teenage drinking increases with grade until 93 percent of 12th grade boys and 87 percent of 12th grade girls have experience with alcoholic beverages.

We assume, therefore, that a large number of teenagers will drink at least occasionally. Ours also is a driving society, with over 125 million licensed drivers in the United States, 13 million of whom are under 20 years of age. Teenage social structure places great emphasis on the car and driving, with the driver's license frequently viewed as the right of passage into the adult world. Through the automobile, the teenager can experience vicarious power and autonomy seldom afforded in other areas of his or her life.

Thus, we also assume that the most eligible teenagers will drive, and at times they will be faced with a situation involving drinking and driving. Over the past decade alone, an estimated 250,000 Americans have been killed in automobile alcohol-related crashes, and millions more have been seriously injured, many crippled and maimed for life. Many of those killed and crippled were innocent children.

Drinking driving is the most often committed violent crime in the Nation and a significant cause of death among our youth. The No. 1 cause of death for Americans up to age 30 is motor vehicle incidents, and over half of highway deaths are alcohol related. Our youth are being slaughtered on the highways every day. Forty-four percent of all night-time fatal alcohol-related crashes are caused by the 16 to 24 age group.

This year, another 26,000 people are projected to be killed by drinking drivers, and about 750,000 seriously injured, at a cost exceeding $5 billion. Clearly, drunk driving is one of the Nation's most serious health and safety problems, one which experts say is worsening.

Teenage drivers not only are more in jeopardy than drivers of other age groups, but, less well known, they contribute substantially to the deaths of other teenagers as passengers. A new research study by the Insurance Institute of Highway Safety focuses on the deaths of teenage passengers and includes these findings: Teenage passengers show a high death rate per capita compared to passengers of other ages, the increased rate starting at age 13.

The majority of fatally injured teenage passengers sustained those injuries in vehicles driven by teenagers. Deaths of teenage passengers tend to occur in night-time crashes, especially weekend nighttime crashes.

However, I am pleased to report today to you that there is a growing recognition to the seriousness of this problem by teenagers. I am particularly pleased that a new and creative program called SADD—students against driving drunk—has been organized to alert and inform high school students across the Nation about the potential dangers of misuse and abuse of alcohol as it relates to driving.

The program was initiated at Wayland High School in Wayland, Mass. in September of 1981. It has grown in membership in a few months from 1,000 in Wayland to over 150,000 students in Massachusetts and other States.

The question often asked is why is this program working while so many others have failed? SADD works because these students have recognized the following facts.

Deaths due to drunk driving is the teenagers' No. 1 health problem. It is the teenagers who drink and drive and cause death to themselves and oftentimes to their friends. It is the teenagers who are totally unaware of these facts, and it is the teenagers themselves who must solve their problem. I want to reemphasize the last one: It is the teenagers themselves who must solve their problem.

The SADD program has given students across the country the opportunity to challenge and wage war against their No. 1 enemy—the drinking driving problem.

SADD has four objectives: to eliminate the drunk driver and save lives; to conduct community awareness programs; to alert students of the dangers of alcohol and driving; and to organize peer counseling programs to help students who may have concerns about alcohol.

An integral part of the program is a mandatory course given usually to students who are sophomores prior to their driving license age at the high school, designed to improve the students, knowledge and attitudes about alcohol and drugs, and to assist students to plan their behavior in order to reduce their chances of becoming involved in drunk driving situations.

Another very important part of the SADD program involves a contract entered into by parents and students. Students pledge to call parents for advice or transportation at any hour from anyplace if they are ever in a situation where they have had too much to drink or a person driving them has had too much to drink.

The parents, in turn, agree to provide transportation home or taxi fare home at any hour or anyplace with no questions asked or argument given. Discussion at a later time, of course, would be appropriate. In addition, parents agree to seek safe, sober transportation home if they are ever in a situation where they have had too much to drink or their friends have had too much to drink.

It is clear that the program has already had tremendously positive effects. Students in over 150 schools in Massachusetts and many schools in other States proudly wear SADD T-shirts, buttons, and display the SADD bumper stickers on their cars.

SADD has been accepted by students in Massachusetts and other States, and it continues to grow through chapter membership. This summer alone, we have had over 200 requests for SADD curricu-

lum guides, which will be sent out hopefully by the end of this month.

The program has been endorsed and funded by the Governor of Massachusetts, who is honorary chairman; the Boston chapter of the Mothers Against Driving Drunk, MADD; the Iowa Governor's Task Force on Driving and Drinking; the Massachusetts Governor's Task Force on Driving and Drinking; the National Highway Traffic Safety Administration; the U.S. Brewers Association; Preferred Risk Insurance Co. in Iowa; and the Presidential Commission on Drunk Driving, and many others too numerous to mention here.

SADD is a proven life-saving program because it is a student-motivated program. They believe in the concept of not drinking and driving. This is the message they are bringing to their fellow teens. The program promotes positive peer pressure.

SADD is the first program of its kind to involve the school, the home and the community in public awareness and community spirit to combat the drinking driving issue. The program is now being sponsored by governmental, private and public groups in order that the SADD message may be spread to communities across the Nation.

The slogan of SADD is: If we can dream it, it can be done. I am hopeful that by the conclusion of this school year, many more communities will have joined in this dream to eliminate the No. 1 tragedy facing our youth today—deaths due to the combination of drinking and driving.

[The prepared statement of Mr. Anastas follows:]

Prepared Statement of Robert Anastas

"By a wide margin, the major public health problem for teenagers in the United States is injuries associated with motor vehicle use."

The enormity of the issue is thus summed up in a new research study by the Insurance Institute for Highway Safety. Warnings of the sometimes tragic combination of a teenaged driver and an automobile are common. But the real story goes beyond that. Starting at the age of 13, motor vehicle passenger death rates per capita climb sharply compared to passengers of other ages. Motor vehicle related fatalities are suffered by teenagers at more than twice the rate that would be expected on a population basis. According to one institute study, more than 7,000 teenagers lost their lives in passenger car crashes in 1978.

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Thus, we also assume that most eligible teenagers will drive, and at times, they will be faced with situations involving drinking and driving.

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This year another 26,000 people are projected to be killed by drinking drivers and about 750,000 seriously injured at a cost exceeding five billion dollars. Clearly, drunk driving is one of the nation's most serious health and safety problems, one in which experts say is worsening.

Teen-aged drivers not only are more in jeopardy than drivers of other age groups but--less well known--they also contribute substantially to the deaths of other teenagers as passengers.

A new research study by Allan F. Williams and Ronald S. Karpf of the Insurance Institute for Highway Safety focuses on the deaths of teen-aged passengers and includes these findings:

--Teen-aged passengers show a high death rate per capita compared to passengers of other ages, the increased rates starting at 13.

--The majority of fatally-injured teen-aged passengers sustain those injuries in vehicles driven by teen-agers.

--Deaths of teen-aged passengers tend to occur in night-time crashes, especially weekend night-time crashes.

However, I am pleased today to report to you that there is a growing recognition to the seriousness of this problem. I am particularly pleased that a new and creative program called S.A.D.D.--Students Against Driving Drunk has been organized to alert and inform high school students across the nation about the potential dangers of the misuse and abuse of alcohol as it relates to driving.

The program was initiated at Wayland High School in Wayland, Massachusetts in September of 1981. It has grown in membership from the 1,000 Wayland High School students to over 150,000 students in Massachusetts and several other states.

The question most often asked is, "Why is this program working while so many others have failed?"

S.A.D.D. works because these students have recognized the following facts:

--Deaths due to drunk driving is the teen-agers' number one health problem.

--It is the teen-agers who drink and drive and cause deaths to themselves and often times to their friends.

--It is the teenagers who are totally unaware of these facts.

--It is the teen-agers themselves who must solve their problem.

The S.A.D.D. program has given students across the country the opportunity to challenge and wage war against their number one enemy--the drinking and driving problem.

S.A.D.D. has four objectives:

1. To help eliminate drunk driving and save lives.
2. To conduct community alcohol awareness programs.
3. To alert students of the dangers of alcohol and driving.
4. To organize a peer counseling program to help students who may have concerns about alcohol.

An integral part of the program is a mandatory course given for sophomores at the high school designed to improve the students' knowledge and attitudes about alcohol and drugs and to assist students plan their behavior in order to reduce their chances of becoming involved in drunk driving situations.

Another very important part of the S.A.D.D. program involves a contract entered into by parents and students. Students pledge to call parents for advice or transportation at any hour from any place if they are ever in a situation where they have had too much to drink or the person driving them has had too much to drink. The parents, in turn, agree to provide transportation home, or taxi fare home, at any hour or any place with no questions asked or argument given. Discussion at a later time, of course, would be appropriate. In addition, parents agree to seek safe, sober transportation home if they or the person driving them have had too much to drink.

It is clear that the program has already had tremendously positive effects. Students in over 150 schools in Massachusetts and many schools in other states proudly wear S.A.D.D. tee shirts and buttons and display the S.A.D.D. bumper stickers on their cars.

S.A.D.D. has been accepted by over 150,000 students in Massachusetts and in other states. It continues to grow through chapter memberships. It has been endorsed by:

The Governor of Massachusetts, who is Honorary Chairman;

The Boston Chapter of Mothers Against Drunk Drivers (M.A.D.D.);

The Iowa Governor's Task Force on Driving and Drinking;

The Massachusetts Governor's Task Force on Driving and Drinking;

The National Highway Traffic Safety Administration;

The United States Brewers Association;

Preferred Risk Insurance Company; and

The Presidential Commission on Drunk Driving

and many others too numerous to mention.

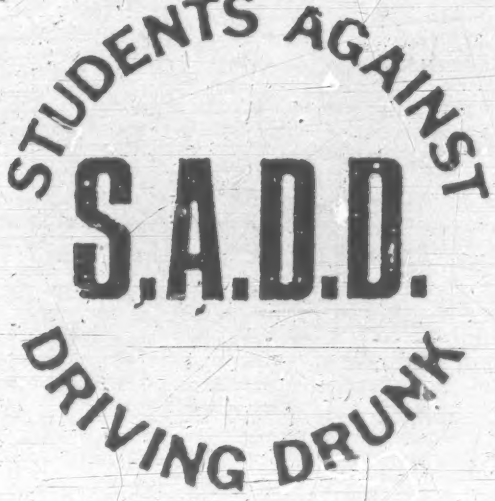
S.A.D.D. is a proven life-saving program because it is student motivated. They believe in the concept of not drinking and driving. This is the message they are bringing to their fellow teens. The program promotes positive-peer pressure.

S.A.D.D. is the first program of its kind to involve the school, the home and the community in public awareness and community spirit to combat the drinking-driving issue.

The program is now being sponsored by governmental, private and public groups in order that the S.A.D.D. message may be spread to communities across the nation.

The slogan of S.A.D.D. is: If we can dream it--it can be done.

I am hopeful that by the conclusion of this school year, many more communities will have joined in this dream to eliminate the number one tragedy facing our youth today--deaths due to the combination of drinking/driving.


STUDENTS AGAINST
S.A.D.D.
DRIVING DRUNK

WHAT IS S.A.D.D.?

A name which now has meaning to over 150,000 high school students.

WHERE?

In over 100 schools in Massachusetts and also in schools in Florida, North Carolina, South Carolina, Georgia, Connecticut, Maine and New Hampshire.

WHY?

Because those students have recognized the following SAD FACTS:

+ Injury from alcohol-caused crashes is teenagers' No. 1 health problem today.
+ Teenagers who drink and drive cause the deaths of themselves and others.
+ Teenage passengers show a high death rate starting at age 13.
+ The 16 to 24 age group causes 44% of night-time fatal alcohol-caused crashes.
+ In 1980 more than 7000 teenagers lost their lives in auto fatalities.
+ And that most teenagers are totally unaware of these SAD FACTS.
+ BUT IF THEY WERE, THEY COULD DO SOMETHING ABOUT IT!

WHAT DOES S.A.D.D. STAND FOR?

Students Against Driving Drunk--students who have organized for the following:

+ To help save their own lives and the lives of others.
+ To educate students concerning the problem of drinking and driving.
+ To develop peer counseling among students about alcohol use.
+ To increase public awareness and prevention of this problem everywhere.

HOW, WHERE AND WHEN DID S.A.D.D. BEGIN?

It began in September, 1981, after a mandatory health education program for sophomores at Wayland High School, 20 miles west of Boston, which school has 1000 students enrolled. The program was developed and conducted by Robert Anastas.

WHO IS ROBERT ANASTAS?

+ Director of Health Education for the Wayland Public School System in Wayland, Massachusetts, who has taught at both high school and college levels.
+ Recipient of the 1971 "Teacher of the Year Award" and the National Merit Award in Education, given by the Massachusetts Teachers Association.
+ Native of Hudson, MA. Graduate, American International College, Springfield, MA; attended State College of Framingham, MA, the University of Michigan, and Northeastern University, Boston; rec. M.Ed. from Worcester State College, MA.
+ Lecturer at seminars and World Congresses on drug and alcohol abuse; author of articles on these subjects; and counselor, having helped over 1000 clients.
+ Member, Massachusetts Governor's Task Force on Highway Safety and Alcohol Abuse.

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WHAT WAS THE ORIGINAL PROGRAM?

A series of 15 programs in health education for students who would expect to acquire licenses to drive motor vehicles. They were focused on the use of alcohol in relation to driving, since Robert Anastas recognized this to be the No. 1 health problem facing teenagers today. Speakers were brought in from outside the school from a variety of professional fields to supplement the study. Lawyers and a judge discussed legal problems. Police officers spoke of enforcement difficulties. Highway safety and alcohol beverage commission officials presented facts and statistics. Medical and insurance problems were given attention. Accident victims and members of Mothers Against Drunk Drivers were invited to tell their stories. A field trip was made to a penal institution to interview convicted offenders. Parents were invited to listen.

HOW DID THE STUDENTS RESPOND?

Statistics suddenly became real. Drinking-driving began to appear as a death threat to them personally and a threat to their generation. They felt this problem was their problem--a challenge to them--and that they should be able to take care of it--to begin exerting positive peer pressure. They wanted to do something constructive.

WHAT DID THEY DECIDE TO DO?

They decided to form the organization called Students Against Driving Drunk--S.A.D.D. A sophomore student, Carl Olson, became Chairman. They designed the S.A.D.D. button, using their school colors of orange and black. They invited juniors and seniors in the same school to join the organization.

Recognizing the need for parent participation and support, the "S.A.D.D. Drinking-Driver Contract Between Parent and Teenager" was devised by which mutual help was promised in difficult social situations. (See copy included herein) This had the serendipitous effect of improving communication between parents and teenagers on other difficult adolescent decisions besides drinking and driving.

They decided, as enthusiasm increased, to have a S.A.D.D. Day at their school, to invite Governor Edward King of Massachusetts to come to Wayland for the event, to make him Honorary Chairman of S.A.D.D., and ask him to help them to launch the program statewide. Gov. King accepted.

Their S.A.D.D. Day was April 15, 1982. Gov. King arrived at Wayland by helicopter. Numerous parents, state and local officials also attended. 1000 orange baloons with the S.A.D.D. emblem were released. S.A.D.D. buttons and T-shirts blossomed everywhere. Students signed pledges which stated:

"We, the undersigned, believe in the S.A.D.D. goal to eliminate the drunk driver and save lives and pledge not to drink and drive, or to let a friend drink and drive. IF WE CAN DREAM IT--IT CAN BE DONE."

HOW DID THE PROGRAM EXPAND?

Students prepared public service announcements for radio and television directed to other schools, saying: "Please help us to realize our dream of no teenage alcohol-related deaths on our highways." Students produced a special song which was taped and began being used on local radio stations.

All Boston newspapers reported events as they developed. All local radio stations ran news stories and public service announcements. Other media coverage developed as follows:

Month of May, 1982-- :30 Public Service Spot on Channel 7 TV, Boston
May 25, 1982 -- Appearances on "Good Day Show", WCVB, Channel 5, Boston
May 30, 1982 -- Anastas and students live on local cable TV talk show
June 3, 1982 -- Scheduled live appearances again on local cable TV talk show
June 9, 1982 -- Dayta Cable TV talk show.
Participation on WBZ, Boston 50,000 Watt Radio Station--LaVell Dyer Show
Public service announcements on radio urged students during prom not to drink and drive.
S.A.D.D. Song--continues to be played by all local radio stations
EXPECTED COVER AND FEATURE STORY IN A JUNE 1982 ISSUE OF NEWSWEEK MAGAZINE.

+ Gov. King proclaimed May 22, 1982 as S.A.D.D. Day in Massachusetts, giving S.A.D.D. statewide recognition. Students in all schools which had responded to the publicity and the appeals of the Wayland students to join them went to supermarkets throughout the Commonwealth, distributing literature, buttons and bumper stickers.

+ On May 27th members of the Wayland S.A.D.D. and Robert Anastas went to Boston and along with Gov. King and the Commissioner of Highway Safety, George Luciano, launched the 101 Day Safety Campaign in Massachusetts, to last from Memorial Day to Labor Day, 1982.

WHAT DOES THE S.A.D.D. SUCCESS THUS FAR SUGGEST?

It suggests that high school students everywhere can take the leadership in the prevention of their own alcohol-related deaths and injuries from drinking-driving if they can be given the necessary information, inspiration and leadership.

Contract

A

Contract

Between

Parent and Teenager

The S.A.D.D.

Drinking-Drive Contract

TEENAGER: I agree to call you for advice and/or transportation at any hour, from any place if I am ever in a situation where I have had too much to drink or a friend who is driving me has had too much to drink.

Signature _____

PARENT: I agree to come and get you at any hour, any place, no questions asked and no argument at that time or I will pay for a taxi to bring you home safely. I would expect we discuss this issue at a later time.

I agree to seek safe sober transportation home if I am ever in a situation where I have had too much to drink or a friend who is driving me has had too much to drink.

Signature _____

Date _____

Distributed by S.A.D.D.
Students Against Driving Drunk

INTRODUCTION

In order to implement the S.A.D.D. Program in your school, we recommend the formation of a student(s)-teacher-administration committee to examine this fifteen session program to decide what is the best way to use it in your school.

The fifteen session program covers specific classroom exercises about information and attitudes regarding driving and drinking. The culmination of all this is a student action - S.A.D.D. - program. Feel free to adppt this material to fit your school needs; maybe time will permit you to conduct one or two of these lessons. This is your decision. Enclosed also is information for a program to be conducted during Junior Prom time and Senior Week.

Upon request, your school may officially join S.A.D.D. as a Chapter Member. A certificate suitable for framing will be sent to you. Contact:

Mr. Robert Anastas
Chairman, S.A.D.D.
66 Diana Drive
Marlborough, Mass. 01752

STUDENTS AGAINST DRIVING DRUNK PROGRAM

S.A.D.D.

SESSION I

Lesson:
Explain S.A.D.D. goals and objectives - The prominent role of alcohol-drugs in our society - the impact of mixing alcohol-drugs with driving in our society.

Objective:
1. To have students openly discuss how they feel about alcohol-drug use.
2. To have students openly discuss the driving-drinking-drug problem.

Closing Procedure:
Each student in class is asked to finish phrase:

"A person who drinks and drives is _____"

Pass out the Revealing Quiz (Take home quiz).

SESSION II

Lesson:
Guest speaker from local court D.W.I.Program. Leave time for discussion.

Objectives:
1. Explain D.W.I. (Court Program).
2. Explain the term "blood alcohol concentration" (BAC) or"blood alcohol level"(BAL).
3. To understand that legally and medically drunk may occur long before the outward signs are appar

4. If you have had more than 2 oz. of alcohol in an hour, reflexes are slowed, decision making ability is decreased, making responsible judgements is impaired.
5. Comparative amounts of alcohol in commonly consumed beverages - beer, wine, whiskey.

SESSION III

Lesson:
The Party - What do I do? How do I say no? - Peer Pressure

Objective:
1. Distinctions between acceptable and unacceptable drinking pattern.
2. Explain motivations for the use of alcohol by teens at parties.
3. Realize it is a responsible act not to drive with someone who is under the influence.
4. To understand it is better to confront the drinking and driving situation head on - express your opinion and feeling toward this situation understand you have this right to express your feeling and to be heard.

SESSION IV

Lesson:
Guest speaker - Drug and/or Alcohol Rehabilitation Center

Objectives:
1. The reasons alcohol-drug consumption poses particular risks for teenage drivers.
2. Make available list of agencies to help those having problem with alcohol in their lives.
3. Contact for students - someone to relate to, if the need arises.

SESSIONS V-VI-VII

Lesson:
Legal consequences - review State law - local situation.
Guest speaker:
Session V - Alcohol Beverage Commission
Session VI - Lawyer - Lawyers Assocaation
Session VII - Police - Local Police Officer

Objectives:
1. ABC - To understand State law regarding driving and drinking (Pass out State law and discuss).
2. Lawyer - Understand: Legal Process concerning D.W.I. - Court System - Insurance - Family Responsibilities and Liabilities - License is a Privilege not a Right.
3. Police - a) role of police in town
   b) local situation as police see it
   c) what can be done by police and teenagers

SESSION VIII

Lesson:
Open forum on legal consequences.

Objectives:
1. Have student openly discuss all speakers - presentations.
2. Discuss pros-cons of presentations.
3. D.W.I. is a community as well as individual problem. Start to formulate plans for better relationship with police (meet with police to discuss alternatives to drinking - parties).

SESSION IX

Lesson:
Guest Speaker: Mass. Safety Council-Highway Safety Presentation. Film on driving and drinking by Mass. Safety Council.

Objectives:
1. Significance of alcohol in traffic fatalities and injuries.
2. Effects of alcohol and drugs on the body and mind, including driving performance.
3. Factors determining the differential influence of alcohol on an individual.
4. Drinking to the level of impairment and then driving is dangerous, unacceptable behavior.

SESSION X

Lesson:
Teens and D.W.I.

Objectives:
1. Disproportionate involvement of teens in alcohol-drug related crashes.
2. Understand what alcohol and other drugs can do to impair your driving ability.

Pass out and work on Drug-Driving Worksheet.

Scenarios:

1. You are at a party and your best friend has just accepted a ride home from another friend who is drunk. No one else lives near. You have no license and no money, and you know your friend doesn't have much money. He lives 2½ miles away. It is a cold winter night, around 11:30 p.m.. What could you do? What would you do? Why?

2. Your 17 year old sister has a date with her boyfriend. You just let him in the door, and he's obviously drunk since he knocked over a lamp trying to sit down and talked only nonsense. You go upstairs and tell your sister he's drunk and she tells you to mind your own business. You know they are going in his car to a party way on the other side of town. Your parents are next door with friends. What could you do? What would you do? Why?

3. You are hitch-hiking to school because you are already late for first period. A nice looking, middle-aged lady in a station wagon offers you a ride, so you get in. You are sitting next to her in the front seat and you can smell whiskey on her breath. In the back seat are her two small children and a dog. What could you do? What would you do? Why?

4. Your boyfriend has been frequently going out drinking with his friends and then driving home. He dousn't seem to see anything dangerous about it and he's a nice guy in every other way. Last night his sister told you he was really drunk when he drove home the night before. His parents are always asleep when he gets in. You want him to stop. You're sitting talking with him and feel it's a good time to bring it up. What could you say? What would you say? Why?

5. The party had been going at full blast for over four hours. Everyone had been talking, joking, and living it up. A lot of people had been drinking the fantastic rum punch but there was also beer and hard liquor. Richard and his girlfriend, Susan, Darroll and his girlfriend, Paula, had come together to the party in Richard's car and spent most of the evening talking with each other. Richard was having an especially good time. He was drinking beer all night, almost one right after the other. In fact, Susan was getting a little nervous because after the last party they went to, Richard had had a little too much to drink. When he drove her home, he wandered over the center line, went through a red light, and kept jamming on his brakes very suddenly. So Susan had decided to check on Richard during this party to see if he was in condition to drive. But it's difficult at a party to have a good time and also keep track of how much your boyfriend has been drinking and if he has drunk too much to drive safely. But Susan had spotted several clear signs that Richard was not sober enough to drive and she had talked to Paula in the ladies room about Richard. Paula, in fact, agreed to stick up for her if she needed help persuading Richard not to drive because Paula, too, had noticed some signs that Richard shouldn't be driving. About an hour later, Darroll suggested they all go home. But as Richard pulled out the keys to his car, Susan took him aside and said, " . . . .

SESSION XI

Lesson:
Film - "Options to Live"

Objectives:
Why planning ahead to avoid potential DWI situations is necessary.

SESSION XII

Lesson:
Field trip to local House of Correction.

Objectives:
1. Role alcohol can play in your life on a personal basis.
2. Number of crimes committed under the influence of alcohol.
3. Punishment - it's real.

SESSION XIII

Lesson:
Film "Till I Get Caught" - Alcohol Resource Center Film

Objectives:
1. Commitment to the seriousness and importance of developing personal and social counter-measures for D.W.I..
2. Respect for the right of a person to choose not to drink on an occasion or as a way of live.

SESSION XIV

Lesson:
Contract between Parent and Teenager - The Drinking Driver Contract.
Pass out Family Drinking Guidelines - Alcohol-Driving opinion Survey - sent home to parents with answer.

Objective:
Family discussion on drinking and driving.

SESSION XV

Lesson:
1. Students critique program in writing.
2. Student Against Driving Drunk Goals - Objectives are explained to students.

Objectives:
Student membership in S.A.D.D.
Pass out S.A.D.D. buttons and S.A.D.D. T-shirts.
Welcome new members.

RAA/pk
3/30/82

DRUG	EXAMPLE	WHY DANGEROUS TO USE WHEN DRIVING
ALCOHOL		
DEPRESSANTS		
STIMULANTS		
NARCOTICS		
HALLUCINOGENS		
MARIJUANA		
P.C.P.		

S.A.D.D. INFORMATION

1. Each member of S.A.D.D. is given a S.A.D.D. button (your school colors).

   Omni Buttons - Mr. Latus
   542-1100

2. This is conducted by the Sophomore class, or the class that completes the S.A.D.D. course.

3. S.A.D.D. has student officers and a working force of fifty members.

4. Membership is also open to Juniors and Seniors.

5. S.A.D.D. is in charge of conducting the program for Juniors during Prom time and Seniors during Senior Week.

6. S.A.D.D. will work with teachers, administrators, police and parents to conduct town-wide and school alcohol awareness programs for Junior High School as well as Senior High School students.

7. Freshmen must wait to join S.A.D.D. as sophomores.

8. S.A.D.D. bumper stickers and S.A.D.D. T-shirts are available to sell in order to raise funds for your school. May be purchased from Omni Ad Specialists - S.A.D.D. Division, 66 Canal Street Boston, Mass. 02114.

RA/pk
3/31/82

HOW DO WE JOIN S. A. D. D.

All your school has to do is the following:

1) Conduct a S. A. D. D. (Students Against Driving Drunk) Day.

2) During this day pass out literature on Driving and Drinking (Ex - Parent-Student Contract and fact sheets).

3) Pass out S. A. D. D. buttons - (school colors).

4) Organize a S. A. D. D. Club - to conduct:

   A) Jr. Prom Alcohol Awareness Program
   B) Sr. Week Alcohol Awareness Program
   C) Parent Alcohol Awareness Program

   Then upon request, Wayland High will send you your official membership.

   - That's all there is to it -

   Please join - We all need each other to win this battle against Driving Drunk.

Note: S. A. D. D. 15 day curriculum is suggested for a comprehensive S. A. D. D. Program.

HOW TO PROMOTE THE S.A.D.D. PROGRAM IN YOUR AREA

STEP I:

Choose a community leader who is well respected to become your Honorary Chairperson. The S.A.D.D. Organization will need a strong voice to carry it in your area. (In our school, we selected the Governor of Massachusetts - others have selected Mayors, City Council, State Representatives, and School Board Members, etc.

STEP II:

In a formal presentation offer the person a *Certificate honoring him/her as your Honorary Chairperson.

STEP III:

Have newspaper - T. V. coverage of this event - Pass out*P.S.A. on S.A.D.D.

STEP IV:

Send out news announcement of your program in your school. Invite other schools to join in on this program by writing more information on program:

STEP V:

Organize a S.A.D.D. Community Awareness Program - in your town-pass out literature on S. A. D. D. and distribute Driver Drink Chart. This should be done on a Saturday. Distribute material in Super Markets (Get news coverage on this event).

STEP VI:

Organize your S.A.D.D. group to work all year on your (4) four S.A.D.D. Goals.

1) Make sure the students conduct the Jr. Prom Awareness Program on Drinking and Driving.

2) Make sure that the students conduct the Senior Week Program.

3) Sell Bumper Stickers - T-Shirts - Money makers for Program.

4) Find out from your Police and Local Courts what is done with the driver who gets caught Drinking and Driving.

5) Launch the 101 Day Campaign from Memorial Day to Labor Day by passing out S.A.D.D. Bumper Stickers.

REMEMBER

1) Be active - Do things

2) Be well organized

3) Have a good advisor

4) Get plenty of news coverage

5) Spread public awareness on Drinking and Driving

6) Remember your goal is to stop the combination of Drinking and Driving. MAKE IT A CHALLENGE TO YOUR COMMUNITY. SELL THE S.A.D.D. SLOGAN - IF WE CAN DREAM IT - IT CAN BE DONE.

Senator HUMPHREY. Thank you, Mr. Anastas.

We are going to have to suspend just for a brief period, 2 minutes or so, to take care of some business. I will be right back.

[Whereupon, a brief recess was taken.]

Senator HUMPHREY. OK, let us go to Mr. Short for his statement, and then Mr. Bland and then we will have questions.

Mr. SHORT. Thank you, Senator. Good afternoon, Mr. Chairman. My name is Charles L. Short and I am testifying today as the Chairman of the Montgomery County, Md., Ad Hoc Task Force on Drinking and Driving.

I commend your efforts through these hearings to determine what more can be done to reduce the amount of needless and tragic death and injury resulting from drunk driving. Although you have heard this many times, without question the deaths of 26,000 persons annually and hundreds of thousands of injured persons and billions of dollars in damages caused by drunk drivers is a national disgrace. We must work at all levels of government and through every community institution to recognize the horror of this problem and to act to make drunk driving legally and socially intolerable.

My testimony today will focus on what one county has done to work toward the reduction of drunk driving. I believe our work can be used by other local governments as an example of a process which can be used to begin a local anti-drunk driving effort and as examples of several activities undertaken by our Government and community to reduce the numbers of individuals who drive drunk on our roads.

Our task force was appointed by our elected county executive, Charles Gilchrist, in July of 1981. Mr. Gilchrist recognized that any significant and permanent effect upon drunk driving in Montgomery County would have to include total community response to the problem. He therefore included on the 26-member task force representatives from several categories which appropriately should have major roles in resolving some of the problems the task force would identify.

Along with officials from the various enforcement agencies, the county executive appointed representatives from the restaurant association, beer and wine sellers association, local hospitals, clergy, public schools, the bar association, various rehabilitation programs, the chamber of commerce, an insurance company representative from GEICO and, very importantly, victims of drunk driving crashes.

Also on our task force, to assure coordination with the State and Federal efforts, was State delegate Jerry Hyatt, who serves on the Governor's Task Force on Drunk Driving, and our Congressman, Michael Barnes, who, as you know, is a congressional representative on the President's Commission on Drunk Driving and a cosponsor in the House of important pending Federal legislation dealing with this issue.

We were most fortunate to have John Moulden from the National Highway Traffic Safety Administration, a resident of our county and a nationally recognized expert on drunk driving, on our task force.

We began meeting in September of 1981. The first issue which we quickly recognized was that our membership came to the meeting with very different levels of knowledge and understanding of the problem. We therefore spent a great many hours walking through the drunk driving scenario, in the hope that we could establish among ourselves a base of information from which we could make informed recommendations.

We heard from all enforcement agencies, from bartenders, waitresses, restaurant owners, and from drunk drivers and victims as well. Once we finished this walk through, the task force identified three general areas which surfaced as needing careful study. These included enforcement, rehabilitation and public education.

These committees worked very hard for 7 months and in May of 1982, after thousands of hours of community study and work, our task force made its recommendations to our county executive. I have made copies of the report available to you through your staff.

Our report made 66 recommendations which would greatly reduce drunk driving in Montgomery County. The recommendations were specific but covered a broad range of activities. These included the need for improved communication among all elements of the enforcement system; the continuation of aggressive enforcement of drunk driving laws, including the use of sobriety checkpoints; the modernizing of the enforcement system by increased use of electronic equipment, from portable, pocket-sized breath-testing equipment through the courts' statewide computer system; increased training for police, prosecutors, defense lawyers, and judges in matters relating to drunk drivers; required preparation and use of victim impact statements; establishment of sentencing guide-

lines, which would include a minimum fine; required pretrial assessment of drunk drivers; a special treatment program for juvenile DWI offenders; the creation of a central place in county government and one individual to coordinate all facets of the community's anti-drunk driving efforts; the creation of a standing committee of our local Alcohol Abuse Advisory Council to monitor and recommend activities of the community in the area of drunk driving; the development of a Washington metropolitan area business consortium which would assist in the development and funding of a regional antidrunk driving public education campaign; and the establishment of a central depository for movies, pamphlets, books, a speakers bureau and other information and materials relating to drunk driving so that the public can have access to these materials and be encouraged to become part of the solution.

While our task force's primary goal was to study drunk driving in our community and make recommendations which would reduce its incidence, through the dedication and hard work of our volunteer membership, several activities were undertaken during the tenure of the task force.

Some of these activities were to assist a group of local new car dealers in forming an antidrunk driving group, which is called DADD–Dealers Against Drunk Driving. This group began its campaign in December of 1981 by donating the first pocket breath tester to the county police and by donating the cost of cab fares for our New Year's Eve free dial-a-ride program.

The task force, with the help of local radio and television stations, produced three sets of public service announcements for the Washington area. An attitudinal survey of our community about drunk driving was conducted.

A Christmas and New Year's holiday blitz of public information regarding the dangers of drinking and driving was developed. This included the dial-a-ride effort which provided free rides home for anyone who felt it would be unsafe for them to drive or be driven on New Year's Eve. Eighty-seven persons used this service on that evening.

The task force worked with members of the Maryland General Assembly during its 1982 session for passage of important antidrunk driving bills, advocated that the President establish a Presidential commission to look into this problem nationally, and supported Federal legislation proposed by Congressmen Barnes and Howard, and Senators Danforth and Pell.

We began working with several local businesses to begin a business team against drunk driving. We have over 35 corporations already pledged to participate in the team. Leadership in this is coming from GEICO; the Marriott Corp.; the Capital Centre, which is our local sports arena; and several advertising firms, including Earle Palmer Brown and Ehrlich Manes.

During the high school prom and graduation period, we cosponsored Project Graduation with the business/community team, the Montgomery County Council of Parent Teachers Association, and the Student Government Association. This project is a major effort to increase the awareness of our students of the dangers of drinking and driving. The program has received national attention and is being duplicated in many areas.

During the prom and graduation period in Montgomery County, not a single alcohol-related accident involving students was reported.

The Montgomery County government did not wait for our final report to act either. As problems were identified by the task force, County Executive Gilchrist immediately acted to resolve them. The police department has increased its arrest rate by 300 percent. The local media have been kept fully informed about enforcement activities. The States attorney's office has made the names of all those convicted of drunk driving available to the press. Our largest local newspaper, the Montgomery Journal, has been publishing these names regularly since December of 1981.

A special program for DWI offenders began in March of 1982. Moneys were included in the fiscal year 1983 budget to increase enforcement efforts, enlarge rehabilitation programs, and strengthen the county's inspections of licensed beer and liquor-dispensing establishments.

Alcohol-related deaths in Montgomery County have been reduced by over 50 percent this year.

This is only an outline of the highlights of the work of the task force and its recommendations. I hope you will take the time to read the full report. We have found in Montgomery County that by creating a local task force, a single focal point for activities to prevent drunk driving has developed. The community has come forward to participate in the solution of the problem.

My recommendation to you is that you encourage local communities to form task forces of their own. By creating a task force, a community will improve its enforcement procedures and rehabilitation programs. But perhaps of even greater importance, a community will begin the process of recognition that drunk driving is a problem, that it must be addressed by people at the local levels, including government, civic, religious, and business, and that it can be substantially reduced.

Before I conclude, I would like to recognize and thank the National Highway Traffic Safety Administration, the Mothers Against Drunk Driving, and Congressman Michael Barnes for their help on our task force and their leadership in this effort nationally. I also would like to thank our local media for their interest and timely coverage of this important community issue, and the Presidential Commission on Drunk Driving.

Thank you for this opportunity to testify, and good luck as you continue your work.

Senator HUMPHREY. Thank you very much, Mr. Short.

Mr. Bland?

Mr. BLAND. Mr. Chairman and members of the subcommittee, my name is John Bland and I am the director of the Maryland Alcoholism Control Administration. My testimony will be confined to the treatment aspects of the Maryland comprehensive driving while intoxicated program, and I will use the term "DWI" from here on out.

The enabling legislation for this program was drawn and signed into law during the 1980 session of the Maryland General Assembly. Senate bill 716 provided that:

When the conviction is for violation of Section 21-902(A) or 21-902(B) of the Maryland Transportation Article, if the court places the person on probation, it shall require the person to participate in an alcohol treatment or education program approved by the Administrative Office of the Courts as a condition of the suspension of sentence.

During the same year, Gov. Harry Hughes appointed a task force to analyze totally the existing systems regarding the drunken driver and to make recommendations which would lead to legislative and programmatic efforts which would make our streets and highways safe in the State of Maryland.

The first year, the task force on the drinking driver focused on legislative remedies almost exclusively. These laws, signed by the Governor and taking effect on July 1, 1981, have resulted in more rigorous enforcement of DWI statutes and an increased number of offenders being referred for treatment.

The second year of the task force on the drinking driver has been devoted to completing legislative proposals and the development of a comprehensive DWI program. The task force recommended adoption of the Baltimore County program, initiated by District Court Judge David Bates, and its expansion to a statewide level.

I might add just simply as an aside that Judge Bates, who has worked certainly since about the mid-1970's in the development of this particular model, has been extremely influential with his peers in the district court system in the State of Maryland. Judge Bates has also been involved in national forums attempting to express his ideas and share his ideas around the country. He also was on the faculty at the Rutgers Summer School of Alcohol Studies for 2 years.

We feel that this model has an extremely positive chance for replication in Maryland, and hopefully we will be able to share it with our peer States. I will go simply into the details of the program as we have devised it.

The program is predicated on an existing or preexisting alcoholism treatment capacity. Maryland's comprehensive enabling legislation was promulgated in fiscal year 1969, and since that time we have developed a comprehensive alcoholism treatment capacity statewide. Maryland has 24 subdivisions, and there are alcoholism services in each of the 24 subdivisions, providing both treatment rehabilitation and prevention services. My discussion today is strictly related to the DWI treatment aspect.

The Governor, in following up on the legislative remedy and the legislature, provided $3.4 million for this particular program in a 2-year phasing in approach—$1.5 million for fiscal year 1983 and $1.9 million for fiscal year 1984. So, we are, in fact, financed and are targeting September 1 as a moving ahead, target date.

There are five basic assumptions underlying the comprehensive DWI program and they are as follows. The goal of a comprehensive program should be to prevent or deter individuals from driving while under the influence of alcoholic beverages.

Two: Components of a successful comprehensive DWI program must include: (a) an effective enforcement system, including apprehension procedures; (b) appropriate secondary prevention measures aimed at those individuals apprehended for driving while intoxicated. These include intensive and focused education for the nonprob-

lem drinker and rehabilitation and treatment for the identified problem drinker/alcoholic; (c) primary prevention efforts aimed at school-age and adult populations.

The third assumption: The enabling systems of a successful comprehensive DWI program include State and local police, the court system, the motor vehicle administration, the department of transportation, the alcoholism control administration, the local county or city health department's program, and community support services.

Each of these systems bring to the program its own unique set of skills and areas of expertise. To maximize existing resources and to operate the most effective and efficient system, it is imperative that these systems function in a coordinated, cooperative, and nonduplicative fashion.

The primary enablers of the Maryland comprehensive DWI rehabilitation program are the court system, which functions as the enforcer and legal monitor; the county or city health department, which oversees the clinical aspects—that is, the initial assessment, clinical treatment and education for the problem drinker or alcoholic, and case management; and the department of transportation motor vehicle administration for DWI education for the nonproblem drinker or the social drinker.

The last assumption has to do with the fact that in our belief system, we feel that all DWI education, curriculum, and instructors must be certified.

The program itself: The alcoholism control administration has carefully studied the current resources available to the DWI population. A variety of programs are currently available, including programs administered by county health departments, MVA and other separate DWI programs, most notably the Baltimore County judicial program, and that was the Dave Bates program that I mentioned earlier.

In addition, ACA has reviewed various other DWI systems in neighboring States, as well as reviewing the overall system of treatment and education available to problem drinkers separate from DWI offenders. With that background, we have developed a comprehensive DWI program.

The various pieces of a comprehensive system are in many ways currently available in many of the jurisdictions in Maryland. However, there is not a formally developed procedure from the beginning to completion of the DWI program. There are insufficient resources most notably in manpower. There is duplication of effort, as well as uncertainty as to which State agency has responsibility for what services.

The alcoholism control administration believes that there currently exists a very stable network of services available which can be built upon at the county health department level. There are two major considerations which lend support to this conclusion.

First, the present system of services to alcoholics is a county-based system in which the alcoholism control administration contracts with each of the county health departments and the health department in Baltimore City. These agencies have local advisory councils to provide community input and are highly visible to citizens in the community.

The other ancillary or additional services which may be needed are, for the most part, county-based services, so that the strength of the present system is the relationships which have developed over time among the various private and public professional helping agencies; criminal justice system, including the judiciary; legal services; probation officers; and the network of self-help groups, most notably AA and Al Anon. We feel that the current system of services provided at a county level has proven to be sound and should be continued.

The second major consideration for the continued involvement of county health departments in the provision of services to DWI referrals is the implicit role which the health department and its core of services provide. The health department has within its structure at each level both the line staff which provides day-to-day assessment and counseling services as well as supervisory and consultant services to assure continuity of purpose of the agency.

There exists good professional direction to all line staff and a reasonable level of basic diagnostic skills to assure that sound judgment prevails in determining the needs of any candidate presenting themselves for services. This is particularly crucial for candidates referred through the DWI mechanism. The assessment process can be very helpful in assisting the individual recognize a problem and begin to take positive remedial steps. This effort to develop positive use of resources is a cornerstone of sound treatment and a logical requirement of treatment staff in the health department.

Other additional resources that are available at the county level are more easily determined and utilized by individuals knowledgeable of the county system. This includes the formal network of services as well as the supportive services which AA and Al Anon provide and which are most crucial. We do feel as though the county-based program is already in operation and it would be most proper and most fiscally sound to simply add to an existing system, and the $3.4 million that I mentioned earlier will simply add to that to, in effect, enhance the existing treatment capacity.

The following is a comprehensive program to address the DWI problem which includes five basic elements. Very quickly, these elements are:

First, identification: individuals are identified by virtue of being charged with DWI or DUI offenses. Following this identification, individuals should be encouraged to undergo assessment either voluntarily or as part of a presentence investigation to be made available to the courts.

Second, assessment: individuals are referred by the courts or voluntarily to the assessment unit to determine the severity of the drinking problem and the most appropriate rehabilitative steps for the individual, whether it be a specific modality of treatment, education, or combination of both.

This assessment should occur as close to the time at which the individual is charged with a DWI offense as possible. The assessment interview includes reviewing the following items: Previous legal involvement; current employment status; drinking history; personal history; appropriate tests, including Mortimer-Filkins and the MAST test.

Part of the assessment will include not only individuals appropriate for needing additional services, but also those individuals who appear to be candidates for a category listed as social drinkers or nonproblem drinkers. Individuals will be determined to fall into category if they meet all of the following conditions: Blood alcohol level is below 0.15; there have been no previous DWI arrests; stable living situation; no drinking history noted in interview.

If individuals are not determined to be problem drinkers, they would be required to participate in an educational DWI program geared solely for social drinkers. Individuals enrolled in the social drinking program may be referred back to the assessment unit at any time if they do appear to be problem drinkers.

Third, treatment: Individuals referred for treatment may be referred to any of the following modalities of treatment: Inpatient detoxification, inpatient residential care, inpatient halfway house care, outpatient individual counseling, outpatient group counseling, and outpatient family counseling.

In addition to this formal treatment, individuals will be encouraged to use the resources of AA. The use of AA as a supportive self-help group will occur throughout, consistent with the principles of AA.

Fourth, education; education for nonproblem drinkers will include a structured educational program for a minimum of 6 weekly 2-hour sessions. The educational program will be provided in the county of residence within a reasonable time of referral. The program will meet certain content criteria and be administered by qualified DWI instructors.

The program administration may vary from county to county. The educational program for social drinkers may be provided by the health department, or it may be provided by some other administrative agency, probably through contract services through the Motor Vehicle Administration. This will depend on local circumstances.

Fifth, management: The case management system is designed to be an aggressive followup system which assures that individuals follow through with the treatment determined to need to occur by the assessment unit. Formal treatment will continue for a minimum of 6 months, unless otherwise determined by the court. We feel, again, that this is a major concept emanating out of the base model; that a longer period of treatment will have a very positive effect on recidivism and repeat offenders.

The case management system will review records for an assurance of development and implementation of a comprehensive treatment plan. A report will be made available to the court regarding each individual's use of the recommended rehabilitation steps at either termination or at the end of 1 year.

Following the completion of formal treatment, the case management system is designed to assure that individuals continue to enforce positive rehabilitative gains made both through the use of formal rehabilitative services as well as the encouragement and use of self-help groups such as AA.

At the end of one year, case management will submit a written report to the court indicating the status of the individual at that time. A judgment will be made not only in terms of future driving

offenses, but also of current level of function that includes the following items: Legal involvement, employment status, personal functioning, and alcohol use.

The case management system will assure that the courts have accessibility to pertinent information from the records of individuals referred through this system. The case management system will assure that each individual participates in a management information system and appropriate tracking system, whether it be administered by ACA or another agency as part of a comprehensive DWI program.

ACA will assume coordination responsibility to see that each of the local jurisdictions has in place all the component parts of the DWI program as described, ranging from identification through case management. ACA will also evaluate each specific DWI program to assure that the end results in reduction of drunk driving are, in fact, being accomplished.

This administration will continue to work cooperatively with other State agencies to assure that the DWI program is the most cost-effective that can be developed and is designed to most clearly show the maximum beneficial results.

Mr. Chairman, I thank you very much for this opportunity and I think this is a very important forum.

Senator HUMPHREY. Thank you, Mr. Bland.

Mr. Anastas, I wanted to question you about the organization, SADD. I understand from your testimony that there are two major thrusts involved in this program; first, the setting up of a curriculum in each school, and second the promotion of contracts between students and parents with respect to getting a ride home.

Is that correct? Are there two basic thrusts, or is there more to it? How does the element of peer pressure come into play here? Is that just a casual thing among students or is there a formal structure to encourage that?

Mr. ANASTAS. There is really a formal structure that occurs. What happens is it is an attitudinal situation that develops. As the students begin to realize that there is no real need to drink and drive–that combination is not needed— then they begin to feel the pressure easing on them at parties or wherever they may be.

It is also an attitudinal approach developing in the school, mainly because they are not preaching it, but they are kind of living it daily; that this is not going to be the attitude of the mass of the population of the school, to drink and drive. The idea is to sell the concept of not drinking and driving. You are not out there pitching, "I do not want you to drink ever, I do not want you to drive ever." The idea is that we do not want that combination together.

I believe the drinking end of it takes care of itself in the academic classroom where they have health classes. This is focusing on one issue. This is a real issue, and that is why I think it works, mainly because you are attacking that particular area of concern drinking and driving.

Senator HUMPHREY. How do the attitude changes take place? Does this occur in the classroom, or how do you get the ball rolling?

Mr. ANASTAS. Yes; I would say it would take place first in the classroom. We have a 15-class structured period that we can offer people through our curriculum guide. If you cannot do that in your system, then we have what we call a minicourse approach to the whole program, and it would certainly be structured in the classroom setting first, where you are presenting facts to the students about what I gave you here and making them aware that this is their No. 1 problem; No. 2, getting them to join in as a mass to do something about the problem on a community and a school basis; then, third, getting out and actually doing it, becoming part of the effort. That is what brings them together as a unit, I think.

Senator HUMPHREY. You say getting students to do something about it. What do they do?

Mr. ANASTAS. The "do something about it" would be organizing themselves into the SADD program and running community awareness programs or doing projects, such as what we are doing this summer. The students are on what they call their 101-day campaign. They are issuing bumper stickers free to supermarkets, to banks, and so forth, and that is a complete community awareness type of thing.

In the fall, we will conduct a community awareness program on alcohol and drinking, and also on drug abuse, for the community. Now, it is nice when students can motivate their parents or the adults that come to a function they are running. What we are trying to do is have it so that students are offering this as a program for the adults in the community. Therefore, the adults can come to a student-motivated program. It is not so much adults asking students to come; it is the students asking the adults.

Senator HUMPHREY. So, there are various public affairs programs that are a part of it?

Mr. ANASTAS. Right. It is a continuous thing all year around. Also, I just want to mention this one thing. The students do conduct the junior prom program and the senior awareness program during senior week, which is probably the worst week in any school system. And it is not the faculty doing it; it is the students running this program.

So, what they are doing is they are asking their peers if they will please not drink and drive. Just to give you one quick example, in Wayland the year prior to this program, we had 22 incidents of drinking and driving. We had two deaths that occurred; whether it was drinking and driving is questionable, but it probably was. This year, we did not have one arrest. The police chief wrote a letter commending the students on their behavior, and so forth, and it has just kind of spread to all the communities that have joined the program. It has been a thing where I am sure lives have been saved; there is no question about it.

Senator HUMPHREY. How does a student get one of these organizations started? What is the first step? Is there someone he can contact?

Mr. ANASTAS. Yes. Actually, they can contact me, which is through contacting SADD, care of R. Anastas, 66 Dana Drive, Marlboro, Mass. 01752, and a curriculum guide would be sent out immediately to that particular school. In the curriculum guide is a starter kit that we put together, indicating exactly what you

should do, how you should start the program. If you needed any help, we would be available to come out there and sit and go over the entire program.

The approach that we are trying is to talk to administrators first, student leaders, townspeople, and then get the program rolling that way.

Senator HUMPHREY. Mr. Short, the National Transportation Safety Board has recently recommended that the States consider raising their legal drinking age to 21. What are your thoughts on that proposal?

Mr. SHORT. Well, in speaking for our local task force, I could say very briefly that the task force supported raising the drinking age to 21, and that, in fact, occurred in the State of Maryland in this past legislative session.

My personal thoughts are, as you have probably heard before, if legislatures are going to raise the drinking age, they ought to follow statistics and raise it to 24, because it is up until the age of 24 that the problem is most significant. In fact, I think that the National Highway Traffic Safety Administration figures will show that the ages 18 to 24 are much more substantial than 16 and 17.

I have a concern about the major amount of interest in raising the drinking age to 21. Students, I think, hear that as young people being scapegoated for the drunk driving problem, and I think that is a danger. I think that we big people ought to own our share of that problem and we ought to be careful about raising the drinking age.

Senator HUMPHREY. Yes. You call for special programs for younger DWI offenders. Can you expand on that?

Mr. SHORT. Well, we did recommend such a program. In fact, we have begun such a program. It is called the parents and children together program, PACT. In every administrative school area, we have three in Montgomery County, we have one special youth alcohol counselor. In addition, we have another fourth counselor who serves exclusively the juvenile justice system.

Once a youngster is identified as having been arrested for DWI, they are immediately referred to that counselor. That counselor treats that case not as a DWI case, but as a youngster with an alcohol problem. Youngsters that are blowing .18 or .20 have a real alcohol problem. A young person who weighs 130 or 140 pounds and blows a .20 is a pretty drunk youngster. You can be pretty convinced that they have a real alcohol problem, and the whole family is brought into the treatment program.

Senator HUMPHREY. Mr. Bland, by what means does the State of Maryland keep track of repeat offenders? Does the state keep track of repeat offenders?

Mr. BLAND. At present, it does not.

Senator HUMPHREY. It does not.

Mr. BLAND. We have two studies. One was devised by the motor vehicle administration itself, and Hopkins is the principal investigator. That study is scheduled to have a final report in December of this year. The Maryland DOT has funded a 3-year study in Baltimore City of repeat offenders, not from the point of view of tracking but from the point of view of innovative treatment as an intervention to the recidivism process.

But in terms of data collection to know where and at what point the repeat offender is or is not in the criminal justice system, no, sir. That is one of the major goals, as I implied in the comprehensive system, but it is not in place.

Senator HUMPHREY. I would think that the effective enforcement system that you speak of would have to require that.

Mr. BLAND. That is correct.

Senator HUMPHREY. That seems to be a major shortcoming on the part of most of the States, if not all of them, that they are so crowded with other kinds of cases that these repeat offenders are not spotted until they have killed somebody and a reporter turns up the evidence.

Mr. BLAND. You may find it in your briefing materials that I have supplied your staff, but in an attempt to deal with this issue again in somewhat of an ad hoc fashion, Maryland is developing what we call a hit list. Those persons whose names show in the computer x number of times over a period of time—that list is made public and is provided to law enforcement personnel within the jurisdiction of the last known address.

Again, that is an ad hoc, short-term attempt at dealing with the repeat offender. But to have a quick way and a comprehensive identification system is essentially a goal that has not been put in place.

Senator HUMPHREY. I see. Well, thank you, each and every one of you, for your help and testimony this morning, and for your patience. We are grateful to have your presence here today.

At this point, the Chair orders printed all statements of those who could not attend and other pertinent material submitted for the record. The record will remain open for 15 days for the submission of additional material.

[The additional material supplied for the record follows:]

Statement by Jeffrey N. Kushner, Assistant Administrator, Office of Programs for Alcohol and Drug Problems, Oregon Department of Human Resources, Salem, Oregon

OREGON'S DUII LAWS AND ALCOHOL REHABILITATION PROGRAMS

(A Brief Description)

In August 1981, the Oregon legislature passed House Bill 2010, which established new procedures and penalties governing persons arrested in this state for Driving Under the Influence of Intoxicants (DUII). The bill addresses the penalties and sanctions for all DUII offenses and one segment provides a new option to those individuals who have been arrested for DUII for the first time. Under the law, which went into effect November 1, 1981, persons convicted of a DUII face a potential jail sentence of one year, a maximum fine of $2,500 and mandatory suspension of their driver's license for one year. A restricted license may be issued to enable drivers to go to and from work. This is issued upon the court's recommendation. A second conviction results in the same potential jail and fine penalties with a three year suspension of the driving license. The suspended driver cannot receive an occupational license without a letter of recommendation from an approved alcohol treatment agency. For a third or subsequent arrest, an occupational license may not be issued for at least 90 days, even with a letter of recommendation from an approved treatment agency. The jail and fine limitations remain the same.

The most significant feature of HB 2010 is the option available to first DUII offenders. This option is called the diversion program. To qualify for diversion the driver must have no prior DUII conviction on the driving record in the past 10 years, must not have participated in a similar alcohol rehabilitation program to avoid prosecution and may not have been involved in a reportable or injury accident in conjunction with this citation. Assuming that the offender meets all the criteria established in the law, he/she may agree with the court to be evaluated by an alcohol and drug specialist and to participate in an education and/or treatment program. Successful completion of the program and compliance with other conditions of the diversion agreement will result in the charge of DUII being dismissed. The charge will not appear on a criminal record. However, an entry is made on the driving record, and maintained for 10 years.

The unique feature of Oregon's diversion program is that it is a pre-conviction option. The defendant does not enter a plea and, consequently, avoids all of the expense and time involved in trying the case. Should the defendant fail to satisfactorily complete the diversion program, he/she returns to court and begins prosecution proceedings at that time. The defendant has waived only the right to a speedy trial. Since no plea has been entered, there is no suspension of the driver's license.

As of June 30, 1982, 5,550 Oregonians have chosen this diversion program. This figure represents 80% - 90% of the eligible first time offenders.

This new early intervention program has provided Oregon with an opportunity to establish standardized procedures statewide for the initial diagnostic assessment of persons arrested for DUII and to offer consistent programming for alcohol education/treatment programs serving such clients. The nature and quality of those evaluations and treatment programs are monitored by the Office of Programs for Alcohol and Drug Problems of the Mental Health Division.

The program office has developed a program for the person arrested for drunk driving that exercises consistency and uniformity state-wide, yet allows enough flexibility for clinicians to serve clients in a manner they feel is most appropriate.

The Mental Health Division has developed administrative rules which govern the qualifications, standards and procedures for individuals performing the initial diagnostic assessments of diversion defendants and for those programs offering the diversion education/treatment. The program office conducts mandatory training for the alcohol-drug evaluation specialists and monitors their compliance with Division guidelines and administrative rules. It is the responsibility of the Division to approve all programs, public or private, that want to offer education or treatment programs to the DUII offender. After seeking review and comment by the local county alcohol authorities, including the local alcoholism planning committee, programs must submit an application to the Division and demonstrate compliance with administrative rules governing such service elements. These programs are monitored on an ongoing basis and must be re-approved every two years.

The Evaluation Process and Education/Treatment Programs

Upon qualification and agreement with the court to participate in a diversion program, the DUII offender must report to an Alcohol and Drug Evaluation Specialist (ADES). The bill stipulates that "whenever possible" the evaluator should not be the same person who will provide treatment. Each judicial district has determined for itself how to best implement this requirement and has designated some person or persons within the county to provide this service to the court. To date, 142 persons have been so designated.

At the initial evaluation, the offender is determined to be a social drinker or a problem drinker (on a continuum of beginning problem to alcoholic.) This is accomplished by administering a series of standardized tests, examining the criminal and driving histories of the defendant, considering the blood alcohol concentration and police report at the time of arrest, and conducting a structured interview with the individual. Those classified as Social drinkers are referred to a Level I program and Problem drinkers are referred to a Level II program. Level I programs provide primarily alcohol information education. Level II includes therapeutically oriented education (group or individual,) residential or outpatient therapy, antabuse, or various combinations.

Level I programs are didactic in nature. They are not treatment; and are designed to be used only for non-problem drinkers. They are required to be a minimum of 12 hours and encourage the use of appropriate outside resource people, e.g., police officers, attorneys, doctors, to assist in presenting the material.

Level II programs are designed to be much more intense than Level I programs, although the education component is required in both Level I and Level II. The Division requires that there be a minimum of 24 contact hours with each

client and recommends that, for persons with a serious alcohol/drug problem, treatment be extended for as long as is professionally deemed necessary. The duration of the treatment program is to be agreed upon between the evaluator and the treatment provider. However, the diversion granted by the court may be no less than 180 days nor more than one year. Level II programs must meet all state standards for approval for any services provided to clients. After eight months of standardized evaluations, approximately 66% of the clients have been found to have a problem with alcohol beyond social drinking. Only about 33% of the defendants are referred to a Level I program. This statistic aligns itself with other national studies conducted by the National Highway Traffic Safety Administration.

The program is too new for formal evaluation to have occurred, although an evaluation design has been prepared. Five areas have been established for examination:

1. Effect on the judicial system
2. Effect on the recidivism rate of offenders
3. Effect on client drinking and/or driving behavior
4. Cost effectiveness of the program
5. Cooperation and consistency between initial evaluators and treatment providers.

The potential for impact on the drinking behavior of this population is high. Early identification of problems, coupled with programs designed specifically for first apprehension drunk drivers, has a greater possibility for success than treatment programs that send all first offenders to an alcohol information school. Research findings published by the U. S. Department of Transportation confirm that lecture-oriented DUII Schools do not affect the behavior of Beginning Problem Drinkers or Alcoholics and should not be used for these types of clients.

Funding of the Diversion Program

HB 2010 requires that, when a defendant files a petition for a driving under the influence of intoxicants diversion agreement, a filing fee of $275.00 shall be paid to the court. The court may make provision for payment of the filing fee on an installment basis and/or the court may waive all or part of the filing fee on an installment basis and/or the court may waive all or part of the filing fee in cases involving indigent defendants. The filing fee is to be distributed by the court as follows if the petition is allowed:

1. $70.00 to the agency of organization providing the diagnostic assessment;
2. $5.00 to the Department of Revenue to be credited to the Police Standards and Training Account;

3. $100.00 to the Mental Health Division for deposit in the Intoxicated Driver Program Fund (created by this law;) and

4. $100.00 to be distributed for court costs.

All non-indigent defendants are expected to pay the full cost of treatment in addition to the $275.00 filing fee. The large-volume courts have reported that about 75% of the defendants are paying the full $275.00, 15% are paying part of the filing fee, and 10% are paying none of the fee.

The moneys in the Intoxicated Driver Program Fund may be used only for the following purposes:

1. To pay for providing treatment for individuals who are found to be indigent. Payment is made by the Mental Health Division to the agencies providing diversion services.

2. To pay for evaluation of the DUII programs.

3. To pay the cost of administration of the fund by the Mental Health Division.

Criteria for determining indigency are established by the Division and applied uniformly state-wide. Reimbursement limits are based on the 12 and 24 hour minimum program requirements. Because of other statutory regulations, treatment providers may access the Intoxicated Driver Program Fund only if they are subcontractors of a local community mental health program. To date, approximately 10% of the diversion clients have been classified as indigent and are unable to pay any of their treatment fees. Although the cash flow into and out of the fund has not stabilized, the fund does appear to be self-sustaining.

STATEMENT OF THE

NATIONAL ASSOCIATION OF INDEPENDENT INSURERS

BEFORE THE

SUBCOMMITTEE ON ALCOHOLISM AND DRUG ABUSE

OF THE

COMMITTEE ON LABOR & HUMAN RESOURCES

U. S. SENATE

August 5, 1982

The National Association of Independent Insurers, the nation's largest property casualty insurance trade association, today is announcing a massive offensive against the drunk driver menace which kills 25,000 people and maims another 1.5 million Americans each year.

NAII is pleased to submit this statement outlining key facets of this comprehensive campaign for strengthened laws, better enforcement and public education, and improved crash protection in cars to combat this national problem.

The alcohol and drug-related accident death statistics are grotesque in themselves. The cost of these deaths and injuries to society amount to an estimated $24 billion annually. Our member companies, and we number over 500 members writing nearly

half of the nation's automobile insurance, see the consequences of this tragedy on a daily basis and are keenly aware of the problems caused by drivers impaired by alcohol and drugs. For these reasons, we are reintensifying our efforts to reduce the slaughter on our highways.

At our annual workshop session in April, we spent an entire day with our member companies exploring countermeasures which might be effective in combating drunk drivers, as well as ways in which insurance companies might get even further involved in these efforts. (Speakers' statements, Attachment A) Our Impaired Driver Committee has worked very hard to complete this study and to develop a coordinated program for NAII so we can greatly expand our efforts in the battle against impaired driving.

Today we are announcing a sustained, multi-faceted program to attack the nation's drunk and drugged driver problem. First, we plan to actively support legislative, judicial and administrative countermeasures which offer the greatest likelihood for success in curbing drunk driving, as well as dealing with the drunk driver offender. Second, we have developed a program for educating the nation's youth about the effects that alcohol and drugs have on driving ability. Finally, we are continuing our efforts to have life-saving, injury-reducing automatic crash protection systems, such as air bags, placed in all new cars.

The cornerstone of the NAII program consists of support for the following legislative, judicial and administrative countermeasures:

- Raise the minimum legal purchase age of alcoholic beverages to 21 in those states where it is currently below 21.
- Encourage vigorous enforcement of current drunk driving laws and ordinances at the state and local levels.
- Publicize the strengthening of state and local driving laws as well as law enforcement programs aimed at the drunk driver.
- Handle first-time DUI/DWI offenses where no bodily injury is involved on an administrative basis in order to expedite and increase the probability of drivers license sanctions.
- Make the DUI offender's exposure to the criminal justice system more meaningful by reducing plea bargaining and imposing more flexible penalties commensurate with the individual's conduct.
- Strengthen and refine implied consent laws at the state level to simplify and expedite the processing of DUI/DWI arrests; liberalize evidentiary rules; add more stringent or meaningful penalties where appropriate, and ultimately increase the probability of conviction under the law.

- Encourage continued state experimentation in developing more effective drinking-driving deterrence programs combined with more in-depth research and program evaluation.
- Support federal legislation to continue and enhance the operational capabilities of the National Driver Register, a central indexing service for the collection and dissemination of driver licensing data, and thereafter encourage greater state participation in the Register. (NAII statement, Attachment B).
- Support increased federal highway funding assistance to states adopting tougher drunk driving laws and procedures. (NAII statement, Attachment B).

NAII member company executives are prepared to testify on the state and national levels in favor of such countermeasures. In addition, NAII will encourage its companies to work with citizen action groups toward the shared goal of reducing the number of impaired drivers on the highways, and to involve them in the distribution of educational materials to their employees and to service clubs, schools, churches and other organizations in their communities.

In the educational field, NAII is undertaking a long-term commitment to producing materials on impaired driving for teenagers. One example of NAII's efforts to alert the nation's youth to the effects of alcohol and drug use on driving ability, is the Association's production of a film entitled, "Danger Ahead: Marijuana on the Road." (Press release, Attachment C).

This 22-minute documentary, narrated by Jason Robards, features teenagers and young adults who have run the risks and suffered tragedy on the road under the influence of marijuana alone, or in combination with alcohol or other drugs. Their frank stories carry a powerful message to young people without sermonizing or boring statistics. The film is distributed with a presenter's guide to aid discussion and has been widely shown and well-received by both teenage and adult audiences.

NAII also has begun production of a second film entitled, "Just Went Along for the Ride," which is about teen alcohol and driving behavior and is intended to develop peer pressure on youths who drink or take drugs and get behind the wheel of a car. The new film is scheduled for completion in late 1982 and will be ready for distribution by January, 1983.

Our nation's impaired driver problem is not simply a transportation problem. It is a serious social and national health problem requiring a change in attitudes and behavior, and it must be dealt with as such, beginning with the youth of our country.

The effort to bring about such change requires a commitment on the part of all segments of our society -- federal, state and local governments, the media, citizens groups, churches, teachers and parents, all working together.

Because of the complexities of the problem, NAII recognizes that its course of action will not result in an overnight cure. But we believe it will, over the long term, help to bring about a reduction in the loss of life and limb on our highways.

In the meantime, NAII will continue its efforts to encourage the installation of automatic crash protection systems, especially air bags, in all new cars sold in the United States.

As long as people continue to drink, take drugs, and drive, and as long as accidents continue to happen, the least we can do is see to it that needless death and injury is minimized by utilizing the latest, proven safety technology. We estimate that as many as 10,000 lives could be saved each year, and tens of thousands of serious injuries could be avoided annually if automakers installed air bags in new cars. The savings in societal costs would amount to approximately $2.4 billion a year. (See articles by President Lowell Beck, Attachments D).

We appreciate the opportunity to submit our views on this very serious national problem.

* * *

[ATTACHMENT A]

H. LAURENCE ROSS

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IDENTIFYING EFFECTIVE COUNTER-MEASURES TO THE DRUNK DRIVER PROBLEM

The problematical nature of the automobile crashes is increasingly being acknowledged in contemporary societies. Crashes have been proclaimed, "(a) public health problem of staggering proportions, in terms of both damage to human health and economic waste ..." Approximately 52,000 deaths annually are attributed to traffic crashes in the United States, and crashes are the leading cause of death for Americans ages 1-35. They account for the majority of new cases of paraplegia and quadraplegia, and are strongly involved in production of other serious injuries, including epilepsy and brain damage. The monetary cost of crashes is estimated to exceed $20 billion per year.

A large fraction of these crashes, especially of the most serious ones, involving drinking as a causal factor. Estimates of the proportion of fatalities due to drinking and driving range from one-quarter to one-half. Acknowledgment of this contribution to crashes has spurred policymakers in countries with large motor vehicle populations throughout the world to attempt reduction of drinking and driving by various legal controls. The bulk of these attempts have been based on the deterrence model.

Many of these innovations have been subjected to evaluation, though much of the literature is obscure and inaccessible to academic criminologists. The purpose of this report is to bring the literature to the attention of this audience and to highlight its implications for deterrence theory as well as for public policy.

It has long been recognized that drinking and driving is linked to crashes, and laws prohibiting alcohol-influenced driving have typified vehicle codes everywhere. The early laws took the form of prohibitions against clinically or subjectively described behavior, e.g., "driving while under the influence of alcohol" or "drunk driving." Experience in many countries showed that these laws were accompanied by low probabilities of certain, severe and prompt punishment, as well as by unacceptably high number of alcohol-

influenced drivers, and a variety of modifications were enacted in order to obtain increments in deterrence. The most widely adopted legal approach has been based on the Norwegian law of 1936, which changed the definition of the prohibited behavior from the subjective one of alcohol influence to the objective one of exceeding a specified blood alcohol concentration. Procedurally, the law involved use of newly developed technology for testing bodily substances, including breath and blood, to ascertain blood alcohol concentrations. The principles inherent in this law were adopted in Sweden in 1941 and, following a gap of more than twenty years, in the majority of countries throughout the world with large automobile populations. Although the mandatory prison sentences contained in the original Scandinavian laws are often noted in discussing these laws, the bulk of the adoptions were not distinguished by severity of penalties, but rather by their promise of increases in certainty of punishment due to simplified procedures, involving scientific tests, for charging and convicting violators. The promised increment in the likelihood of punishment may be expected to produce increments in deterrence of the threatened behavior.

The quasi-experimental method of interrupted time-series analysis is of use in inquiring into the effectiveness of these innovations. In most of them there is a sharp, sudden change in the independent variable (the adoption of a new law) which is expected to have an immediate effect upon well-measured dependent variables. Typically, the dependent variables are series of fatal crashes, especially when these are refined to those taking place on weekend nights or those involving single vechicles only, as these crashes are especially likely to reflect the influence of drinking and driving.

Perhaps the best demonstration of the effectiveness of Scandinavian-type laws was obtained in the case of the British Road Safety Act of 1967, which, though accompanied by unremarkable penalties, permitted constables to demand breath tests of drivers involved in crashes and in routine traffic law violations, thus producing the impression of considerably increased likelihood of punishment for drinking drivers. The law was well-publicized officially and, furthermore, because it was controversial, it received considerable media exposure both before and after its adoption. The response of drinking and driving to this law is shown in Figure 1, which displays the index of serious crashes during "drinking hours," and which nicely illustrates the potential of the interrupted time-series method to demonstrate an effect with great plausibility. The usual threats to validity of the conclusion ascribing a before-after change to a particular intervention are ruled out by the size of the drop precisely at the time of the new law, and by the absence of trends and extremities in the general series that could support a variety of plausible rival explanations. Ascription of the change to the effect of the law is further supported by the failure of serious casualties in the non-drinking hours to show a comparable drop at the inception of the Road Safety Act. Additional confirmation of the law's effect was found in studies of blood alcohol concentrations among drivers killed in crashes.

A similar clear illustration of the effectiveness of a Scandinavian-type law in reducing drinking and driving is found in a study of the French law of July 12, 1978. The French law was unique in its authorization of roadblocks in which all drivers could be asked to take screening breath tests for blood alcohol. As in the case of the British study, the effect in France was greater for data series limited to crashes in which alcohol plays a greater part, e.g., nighttime as compared with daytime crashes and crashes in a region with high alcohol consumption as compared with those in a region noted for low alcohol consumption. Blood alcohol concentrations among non-crash-involved drivers were also found to be reduced in an independent study.

Two studies of the Canadian Criminal Law Amendment Act of 1969, which was patterned on the British Road Safety Act, also found evidence of a deterrent effect using interrupted time-series methods. The effect was acknowledged to be smaller than that ascribed to the British law, and the difference was explained by the fact that the Canadian law was a lesser innovation (e.g., the police needed "reasonable and probable" grounds for the tests and not merely the fact that the driver had had a crash or a traffic law violation) and because the legislation received far less publicity and media attention than had the British.

The Netherlands law of November 1, 1974, was modeled very closely on the Norwegian law. It specified a lower tolerated level of blood alcohol than did the laws previously mentioned, and its penalties were severe by world standards. Its evaluation was unusual in that it was based largely upon surveys of non-crash-involved drivers, using breath-testing devices for research purposes. The decline in drivers with elevated blood alcohol concentrations in the criterion year of 1974 was very impressive. However, the coincidence of this law with the fuel crisis of the same year and the failure to find an effect in general fatalities cast doubt upon some of the stronger conclusions reached in the principal evaluation.

Additional studies claiming deterrent effects for Scandinavian-type laws have been done in Austria, Czechoslovakia, and Germany. The methods used by these studies are, unfortunately, too poorly described to permit much confidence in their conclusions. On the other hand, two studies -- of New Zealand by Hurst (1978) and Australia by Birrell (1975) -- that found little or no evidence of a deterrent effect for similar laws can be discounted on the grounds that their data were inadequate to provide a fair test for the deterrence model. An attempt to apply interrupted time-series analysis to crash fatality data in Norway in 1936 and in Sweden in 1941 produced no evidence of marginal deterrence for these original Scandinavian laws; however, in retrospect it seems that these laws were but minor increments in defining the Scandinavian approach, and were surprisingly lacking in newsworthiness, thus perhaps not good examples for testing the deterrent potential of the approach in general.

Opportunities to investigate the deterrent effects of law in the drinking-and-driving area have been offered by numerous enforcement campaigns. The campaigns are designed to increase police activity and, with publicity, to increase the perception of the certainty of punishment for drinking-and-driving infractions. Again, the interrupted time-series method has proved to be a useful analytical tool. Notable evaluations have occurred of campaigns in Britain, New Zealand, and Australia, as well in the United States in the Alcohol Safety Action Projects (ASAPs).

In Britain, although the Road Safety Act of 1967 was initially judged a success, confidence in it declined during subsequent years. A concerned police chief in the county of Cheshire devised the experiment of having his men demand breath tests for blood alcohol in all situations permitted, i.e., all crashes and traffic law violations, between 10 p.m. and 2 a.m. for a week. Not unexpectedly, the numbers of tests increased by a factor of nearly 10. Less expectedly, the numbers of drivers found to have illegal blood alcohol concentrations more than doubled. In using their discretion in "normal" times not to request breath tests, police officers were apparently losing the opportunity to discover and prosecute half the offenders of the Road Safety Act with whom they came into close contact. Encouraged, the chief expanded his experiment over a large number of hours during the month of September, 1975. On this occasion, the press learned of the measure and it became widely known in the area. A result was the appearance of a deterrent effect, evident in monthly series of crash-linked serious injuries and fatalities for Cheshire which showed statistically significant declines during the campaign, despite the small data base on which the series rested.

In New Zealand, reports of the success of the Cheshire "blitz" reached authorities who then mounted similar campaigns during two periods in 1978. Screening tests for blood alcohol were quadrupled during the first period and doubled during the second, and both were supported by official publicity campaigns. Evaluation included studies of liquor consumption in rental ballrooms, road injuries reported to a group of cooperating hospitals, claims filed with the Accident Compensation Commission, and serious crashes. The ratio of nighttime crashes to total crashes responded as predicted to both campaigns and seems to be particularly convincing evidence for the deterrent effectiveness of the New Zealand campaigns.

In Australia, the state of Victoria, which has previously passed legislation permitting "random" breath testing of drivers at roadblocks, intensified use of this technique in 1977 and 1978. The evaluation employed the criteria of reductions in crash fatalities, in serious casualty crashes, and in blood alcohol concentrations among nighttime driver casualties. Changes in the patrolled areas of Melbourne were compared with those in selected control areas. Although flawed by various methodological problems, the findings taken at face value support the conclusion of a substantial deterrent effect for these campaigns.

In the United States in the early 1970s, 35 Alcohol Safety Action Projects (ASAPs) were funded at various locations. The ASAPs embodied, among other innovations, increases in police patrol for drinking drivers and improvements in the processing accused offenders in courts. The typical project increased arrests by a factor of 2.5. The U.S. Department of Transportation (1979) found statistically significant diminutions in nighttime fatal crashes in 12 of the 35 sites.

A few examples exist of situations in which penalties for alcohol-impaired driving were substantially increased without accompanying increases in enforcement. In Finland, the change was a formal one -- the maximum penalty for drinking and driving was doubled in 1950. In two other reported cases the change was informal -- judges threatened to be more severe in penalizing the offenders appearing in their courts.

The Finnish approach to drinking-and-driving law diverged from that of Norway and Sweden until fairly recently. The law defined the prohibited behavior in subjective terms, rather than in terms of blood alcohol concentrations, but penalties were unusually severe. In 1950 the maximum penalty was increased from two years of prison to four years, with the possibility of six years in the event of serious bodily injury associated with the violation and seven years in the event of death. Interrupted time-series analysis was applied to crash data series to investigate the effect of this change. Although there was a decline in crash-related fatalities in that year, which with certain assumptions could be considered significant, it is unreasonable to attribute the decline to the legal change. This is because the drop was greater for less serious casualties (where alcohol is a smaller factor) than more serious, and no drop occurred in the series for single-vehicle crashes (in which alcohol is a major factor), whereas multiple-vehicle crashes declined considerably. The conclusion is that the greatly increased severity of the Finnish law probably did not affect the target behavior.

In Chicago in 1970, the Supervising Judge of the Traffic Court decreed that during the Christmas holidays all convicted drinking drivers would receive seven-day jail sentences. The period of application was subsequently extended. Although broad claims were made for the effectiveness of this effort, submission of Chicago crash data to interrupted time-series analysis led to the conclusion that the lower rate following December 1970 could not be distinguished from chance variation. Moreover, data from Milwaukee, chosen as a comparison city, showed an even greater proportional decline, though again it was not statistically significant. Official files showed that the jail sanction was in fact seldom applied during the period in question, and it is possible that the public did not know or believe that penalties had changed.

The perception of severe penalties was obtained, as noted by survey data, in "Traffictown," an Australian city of 30,000, where a local magistrate

devised a campaign to increase convictions and penalties for drinking drivers. Analysis of the results of the campaign found that serious crashes did not decline perceptibly, but reported crashes decreased and the proportions of crash-involved drivers charged by the police declined significantly.

The theoretical model of simple deterrence posits that the threat of punishment will be more effective as the punishment is more certain, severe, and quick to follow upon the commission of the offense. Commentators have pointed to the fact that deterrence thus conceived is but one of many "preventive" links between punitive law and behavior; that the model may be more valid for specific categories of crimes and criminals; that the variables of punitive certainty, severity and celerity must be understood as perceived rather than actual; and that interaction among these variables is quite likely. However, bearing these qualifications in mind, the scholarly community in general continues to adhere to the simple deterrence model as a basis for understanding legal control. According to the recent evaluative report of the National Academy of Sciences:

> "...the evidence certainly favors a proposition supporting deterrence more than it favors one asserting that deterrence is absent. The major challenge for future research is to estimate the magnitude of the effects of different sanctions on various crime types ..."

Although, even with qualifications, the simple deterrence model is a relatively straight-forward paradigm, and although much effort has been expended in recent years to test it, convincing empirical knowledge in this area is rare, and much more is needed. A considerable part of the existing literature has employed measures of actual rather than perceived threat, even though these have been shown to be widely different on occasions. Furthermore, the bulk of studies of deterrence has utilized statistical analysis of naturally occurring covariations between crime and punishment, although this methodology has been strongly criticized because of the nearly insuperable technical problems inherint in errors in measuring the crime rate, the confounding of deterrence with other factors such as incapacitation, and the possibility that crime affects sanctions, rather than vice versa. Simultaneous variations in other forms of social control also complicate the analyses. These problems have led to an extreme reluctance to accept the results of this type of research as being more than suggestive.

The research on drinking-and-driving law briefly reviewed here is able to cast some light on these issues. The studies can be stronger methodologically than the discredited correlational ones because the frequent introduction of new laws and campaigns provides situations amenable to interrupted time-series analysis Moreover, this analysis can employ data such as fatal crashes which, as social statistics go, are relatively valid and reliable. These indexes are much less subject to the "dark figure" problem than most measures of criminal behavior. Furthermore, there is relatively

less difficulty in distinguishing legal influences from other normative influences on behavior because of the weakness of the latter in traffic control generally and in the matter of drinking and driving specifically. Although it is granted that alcohol-impaired driving is merely one type of behavior subject to deterrent efforts, and that drinking drivers are not necessarily typical of other types of law violators, the social importance of traffic fatalities and the methodological advantages offered by the study of drinking-and-driving law promise to reward attention to these studies on the part of students of crime and deviance more generally.

Several generalizations relevant to deterrence theory can be drawn from the accumulated research on drinking-and-driving law. These are:

First, at commonly prevailing levels of punitive severity, increments in threatened certainty of punishment are able to produce increments in marginal deterrence. This generalization is clearly illustrated for adoptions of Scandinavian-type laws in the cases of the British Road Safety Act and the French law of July 12, 1978. Both of these laws were very well publicized and highly controversial, both before and after their passage, and independent evidence shows that their provisions were well known to drivers. Where the innovations were smaller in scale and less publicized, as in Canada, the deterrent effect was less. The few negative cases, such as Norway and Australia, were marked by very small legal changes and a lack of publicity and newsworthiness, and the reports note methodological problems such as lack of good statistics and the presence of overwhelming simultaneous events that make the detection of very small increments in deterrence extremely difficult. The generalization is confirmed as well in the reports of enforcement campaigns directed to increasing perceived certainty of punishment.

Second, the deterrent effects achieved through increments in threatened certainty of punishment have diminished over time. In the case of adoptions of Scandinavian-type laws, the reductions in indicators of drinking and driving have disappeared after a few months or years. In the case of enforcement campaigns, deterrent effects have not been claimed or noticed following their terminations. It seems reasonable to look for an explanation of this finding in the failure of actual probabilities of punishment to increase very much in law enforcement efforts experienced to date. The chances of any alcohol-impaired driver being charged by the police, even under a Scandinavian-type law with vigorous efforts at enforcement, are extremely low. In Britain, in the years following the Road Safety Act, the chances of being breath-tested were calculated as about one in every two million vehicle miles driven. A Canadian observer writes that according to official estimates there are 26,000 kilometers of impaired driving for every drinking-and-driving charge laid. In the United States, estimates of the proportion of alcohol-impaired drivers being apprehended run between 1 in 2,000 and one in 200, the latter concerning driving on patrolled roads during the

Kansas City ASAP. A similar estimate is reported for Sweden. In short, it seems a reasonable speculation that notorious and publicized measures directed to drinking-and-driving offenses may increase the perceived probability of apprehension, but that the actual level of enforcement proves to be so low that learning occurs and the perceptions of risk decline towards prior levels. The occasional research report dealing directly with measures of risk of apprehension supports this speculation.

Third, at prevailing, very low, levels of certainty of punishment, increments in threatened severity have had no deterrent effectiveness. The doubling of maximum penalties for drinking and driving in Finland apparently had no effect upon alcohol-impaired driving. In Chicago and "Traffictown" the situation of drinking drivers did change, but in unintended and undesired ways. It appears that police and other legal personnel may have responded to penalties considered unusually severe by failing to arrest drinking drivers or by charging them in other legal categories. Indeed, in Chicago it looks as though judges were less likely to find the accused guilty and therefore to apply any punishment at all. A reasonable explanation for the lack of deterrent effectiveness for considerable increments in severity of threatened punishment lies in the negligible probabilities of application of these punishments. This supports the characterization of the deterrence mechanism as involving interaction of certainty and severity and as requiring thresholds or minimal levels of components of threat.

It might be noted that no drinking-and-driving law studies are known to have involved manipulation of the third variable of deterrence theory, celerity of punishment, independent of manipulation of certainty. The apparent temporary success of some ASAPs may have involved improvements in court efficiency which would have increased celerity of punishment. However, it was not possible to disentangle celerity from certainty in the ASAP experience.

We are currently in a period of ferment in policy concerning drinking and driving, which can be expected to provide continued opportunities for deterrence-related research in the future. It is possible to draw some conclusions concerning research priorities from review of our experience to date. These have consequences for the way in which policy-makers should introduce their future innovations in order to maximize the knowledge byproduct of their efforts. In general, the interrupted time-series method seems promising as an analytic technique for future studies of such innovations.

First, research should attempt to measure variations in perceived certainty and severity of threat as functions of changes in actual certainty and severity. Measures of actual risk, e.g., convictions as a percentage of impaired trips, should be accompanied by survey research to determine perceptions of risk, while actual levels are being manipulated quasi-experimentally. This information would permit a test of the speculations offered above concerning the reasons for the immediate success and eventual failure of adoptions of Scandinavian-type laws.

Second, research should attempt to learn whether and at what level there exists a threshold of actual certainty of punishment that can produce lasting deterrent effects and yield increments of deterrence for severity of punishment. Policy-makers should be instructed to maximize certainty of apprehension for drinking drivers to various levels, including the maximum politically feasible level of threat, and long-range as well as short-range changes in drinking-and-driving behavior should be sought. Furthermore, attempts to increase penalties for drinking and driving should be made on the background of greater certainty of punishment than has been achieved to date.

Third, research should be undertaken on the effects of increments of celerity of punishment, independent of changes in certainty and severity.

Deterrent programs are perhaps the only options available in the short run, as "Turn-key operations" to policy-makers interested in reducing drinking and driving by legal means. In pursuing deterrent strategies, policy-makers would be well advised to stay with existing levels of severity of penalties and to attempt, through increasing and pinpointing patrol to increase the certainty of punishment. Perhaps the most urgent advice to policy-makers employing deterrent strategies is to deploy these strategies in ways that lend themselves to evaluation and to increasing general knowledge about the attainment of deterrence, as described in the previous section. In particular, the long-run usefulness of deterrent strategies should be tested by bringing actual certainty of punishment for violators to the maximum politically feasible level, publicizing this, and looking for long-term deterrent results. Such policies, if effective and maintained over time, may help to instill the legal norms into popular conscience through the mechanisms of "habit-formation" and "moral education," and broaden the basis of the general preventive function of the law.

However, it is possible that the results of evaluation of such policy innovations will prove negative: that at the limits of political feasibility long-range deterrent effects cannot be achieved. A related literature suggests some promising long-range alternatives for the policy-maker, requiring a redefinition of the problem to be addressed. Two such redefinitions can be offered at this time:

First, the problem of drinking and driving can be reconsidered as part of a larger problem of alcohol use. According to the "single distribution theory," which finds that alcohol consumption in all groups of individuals to be a function of the total quantity of alcohol consumed in a population, measures to reduce the total consumption of alcohol will have benefits in reducing alcohol-related problems generally, including crashes associated with drinking and driving. Such measures could include raising the price of alcohol by increasing taxation. Additional measures could be devised to reduce consumption of alcohol specifically associated with driving. For example, limitations on the numbers of roadhouses, or on parking spaces

provided by them might be effective. Again, considerable evidence exists supporting the reasonableness of raising the drinking age to the maximum politically feasible limit, as young drivers are especially likely to drink and drive, and to experience crashes as a result of combining these behaviors.

Second, the problem of drinking and driving can be reconsidered as part of the motor-vehicle crash problem generally, and it can be approached from the perspective of rendering vehicles and roads safer environments in which to make mistakes or to suffer their consequences. Thus, hazards such as unyielding signs and barriers can be eliminated from highways, and safety belts and airbags can be provided in vehicles.

It may be that "the safety car concept of passenger packaging can be seen as a kind of ultimate loss reduction solution." But until such time as the ultimate solution is available the possibilities inherent in the deterrent approach need not be discarded by policy-makers. The accumulated research testifies to the achievability of loss reduction through vigorous enforcement of Scandinavian-type laws, at least in the short run, and points to the possibility of achieving long-run effects, which should be attempted and verified by research. Further implementation of deterrence-based measures in drinking-and-driving law by policy-makers, associated with social scientists as evaluation researchers, promises important benefits for social science knowledge and for public health.

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[ATTACHMENT A]

SENATOR WILLIAM T. SMITH

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Big Flatts, New York

THE NEW YORK SOLUTION

Legislative Approaches to the Impaired Driver Problem

Nine years ago, my wife and I lost a daughter to a drunk driver. It was his third offense, and after being found guilty of criminally negligent homicide, he was sentenced to five years probation.

Unfortunately, our experience was all too typical. I found out that too often those responsible for these tragedies, the drunk drivers, were subjected to only routine court action. In my own State, for example, most convicted drunk drivers paid only a small fine - averaging $11 each, and were required to attend a program to educate them about the dangers of their behavior.

Of course, my reaction as a victim was that the State should get tough. I thought my job as a legislator should be to increase the penalties - in order to make the drunk driver suffer a penalty that is more appropriate to the severity of his crime. I thought that this was the way to deter people from drunk driving, and to save lives. I still believe that tough penalties are needed for this offense, but I now know that other things must be done first.

For three years, I sponsored tough legislation that would increase all aspects of the penalties for drunk driving. Looking back, those were my three most frustrating years as a legislator. I found that my views about how we should respond to the drunk driving problem were not shared by other members of the legislature, or by much of the public.

Unfortunately, I found that since most of us are both drinkers and drivers, we have been ambivalent to tough responses to the problem. Many of us, perhaps, have seen ourselves as drunk drivers or can remember instances in which we have had too much to drink, and then driven home.

Yet, over the last few years, we have seen a change in public consciousness about this issue. I believe that there is a new realization that we are not talking about a choice between drinking and abstinence. Instead, the real choices follow the decision to drink; these choices about how much to drink and about how to find a safe way home - with someone who has not been drinking excessively, if necessary.

My point is that the Legislature would not - and should not - act until the public recognized the real nature of the choices we face. Of course, that change in public awareness can - and has - resulted partly from the Legislature's own, non-lawmaking activities.

Public Awareness

I recognized that before the laws could be changed, we must make the public more aware of the drunk driving problem and about the real choices they must make. As a first step, I was able to convince the Legislature to provide funding for a film that would look at drunk driving from a new angle. The film, "Until I Get Caught," was to be produced by Dr. James Maas, a Cornell University psychology professor. Dr. Maas believed that the traditional "blood and guts" approach of drunk driving films did not provide viewers with a positive alternative with which they could identify. The use of scare tactics in these earlier films led audiences to reject the message that they were meant to receive, because they could not accept the fact that they themselves could ever be in the situations that these films showed.

Instead, Dr. Maas focused on situations most viewers have experienced - such as drinking at parties. He then led the viewer to look at the problem through the eyes of a variety of different people who must deal with it - victims, police, prosecutors, and medical experts. Finally, the film suggested ways that the typical drinker can get home safely by making responsible decisions before he is faced with the choice of driving home drunk or not getting home at all.

"Until I Get Caught" wound up having a much greater impact than even I had hoped for. It was shown nationally on PBS, and has been widely distributed to schools, civic organizations, and other groups interested in the problem.

One of the most positive results of "Until I Get Caught" was that it helped speed the development of citizens groups which were formed to combat drunk driving. These groups, such as RID (Remove Intoxicated Drivers) in New York State, and other groups elsewhere, have worked at the grass roots. Their efforts have increased public awareness of drunk driving, stimulated local officials responsible for drunk driving enforcement, prosecution, and adjudication to fully apply the laws, and pressured the State Legislature to provide tough laws that are enforceable by the local officials.

My point here is that non-governmental groups like these, and the actions of educators and the media were as important in making the public aware of the drunk driving problem, and of their role in responding to it, as we were in the Legislature. The insurance industry, too, has played a role in educating the public about drunk driving. By bringing your resources to bear in this way, you have helped reshape public attitudes towards irresponsible drinking and driving.

Later, we in the Legislature acted in another way to focus public attention on the drunk driving problem. We created a Senate Special Task Force on Drunk Driving. The Task Force took as its initial job this education function. By holding public hearings on the issue, we gave experts a public forum to discuss the problems and the responses that they feel are appropriate.

I should add that since the formation of our New York State Senate Special Task Force on Drunk Driving, we have been fortunate to have parallel actions by the Governor, who organized a Task Force on Alcohol and Highway Safety, and by the Assembly, which organized a Subcommittee on Drunk Driving. These committees have held hearings focusing on the problem and have encouraged the development of public opinion supporting recent changes in the law.

The Legal Response

The more I studied drunk driving, the more I began to recognize that what had initially appeared to be a simple problem, which could be solved if we increased the penalties for drunk driving, was actually a very complex one. It required a series of different actions before we could make penalties tougher.

In analyzing New York's legal framework, I realized that we must adopt an approach which would do three things. First, we must educate the public about the dangers of drunk driving. This, I have already discussed. Second, we must make the public aware that if they go ahead and drive after they get drunk, that they are likely to be caught. And third, that if they are caught, they will be certain to be subjected to appropriate penalties.

Unfortunately, I found that our legal system was unable to provide a credible, general deterrent of the sort that I have described. I found that police were making few drunk driving arrests. As a result, drivers accurately believed that they were unlikely to be caught if they did drive while they were drunk. Worse, they often perceived that if they were caught, they could "plea bargain" out of a drunk driving conviction. Even if they were convicted of drunk driving, they were likely to get off with a slap on the wrist - a small fine which would be waived if they enrolled in an educational course for drunk driving offenders.

Getting the Conviction - "Building the Box"

I recognized that the next question to address was how we could give police, prosecutors, and the courts good laws to make successful drunk driving prosecutions possible. We found that New York already had some elements of a workable system, but needed others.

Three key elements were already present in the system.

First, New York already had an "implied consent" law. Implied consent laws provide that those who accept a drivers license are deemed to have given their consent to a proper chemical test request from a police officer. Anyone refusing such a test would be subject to an immediate six month administrative license suspension, and a $100 fine. By penalizing the test refusal, drunk drivers are discouraged from frustrating successful prosecutions by refusing the test. In fact, the great majority of drivers who are requested to take the test do so, and this facilitates the use of the chemical test in their prosecution.

Second, State law provided that a drunk driving conviction could be based solely on a Blood Alcohol Content of 0.10 or more. New York law does not require the police to present subjective evidence of observed intoxication in order to obtain a conviction in court. The ability of police officers and prosecutors to obtain a conviction based "per se" on a driver's blood alcohol content is an essential element of effective drunk driving prosecutions.

A third important element of New York's existing laws was the requirement that in order to become eligible for the Department's Drinking Driver Course, drivers must first be convicted of a drunk driving violation. This is important, because only by attending the Drinking Driver Course can these drivers avoid a three (3) to six (6) month license suspension or revocation. Participation in the course makes it possible to obtain a conditional license that permits driving to and from work, and for other limited purposes. Many states have given up this important prosecution incentive by establishing pretrial diversion programs for drunk drivers.

Following enactment of this drinking driver program legislation in the mid-1970s, the number of drivers charged with a drunk driving offense who were convicted of that offense, rather than of some other violation of the Vehicle and Traffic Law, nearly doubled.

The Task Force found it necessary, however, to take a further step to build an airtight box for drunk drivers. We recognized that plea bargaining is essential to the criminal process, because it gives prosecutors the ability to obtain a conviction without going to trial. But, the plea bargain must be one that results in an appropriate conviction for the violator - a conviction for drunk driving. Thus, we enacted laws which allowed continued plea bargaining in these cases, but only between the more severe (Driving While Intoxicated) charge and the less severe (Driving While Ability Impaired) alcohol charge.

The result is that virtually all convictions in drunk driving cases are now for drunk driving charges rather than for unrelated charges, such as equipment violations. This gives the ability to direct these drivers to the Drinking Driver Course, and - more importantly - to identify repeat offenders to insure that they receive appropriate, more severe, penalties and are directed to rehabilitation.

These laws - the implied consent law for the chemical test, the per se DWI offense based on a .10 Blood Alcohol Content, the requirement of a drunk driving conviction prior to drinking driver program participation, and the plea bargaining limitations, give law enforcement officials the tools to make successful arrests and prosecutions. We then were able to turn to the next part of the Legislature's response to the drunk driving problem - the penalties.

Setting Credible Penalties

We knew that drunk driving penalties in New York State were too weak. Drunk drivers rarely faced a substantial fine, and could avoid a license suspension by taking the department drunk driving course.

My first inclination was to write a law that would mandate jail for all convicted drunk driving offenders. Yet, the more I thought about it, the more I came to recognize the enactment of this penalty would only undo the box that I had worked so hard to put together. The imposition of a mandatory jail sentence flies in the face of the fact that this kind of law creates a tremendous pressure on defense attorneys, prosecutors, and judges to provide an escape hatch. Drunk drivers are almost unique among those who have committed crimes in that they closely resemble the general public in their age, income, race, and education. As a result, those who apply the laws are often more sympathetic to them than to other lawbreakers. Mandatory jail would be difficult to impose, in reality, because it would give defense attorneys a tremendous incentive to take these cases to trial and to appeal to the sympathies of the judge and jury.

At the same time, practical considerations make mandatory jail an unattractive alternative. First, at $50 per day, jail is expensive. Mandatory jail winds up punishing the taxpayers as much as it punishes the offender. At the same time, I had to recognize that with the state's jails already at 108 per cent of capacity, we would have no place to put the 45,000 drivers each year who are convicted of drunk driving in New York.

Finally, I found that "crackdowns," in which drunk driving offenders were threatened with jail, simply had not worked in the past. Those responsible for carrying out the threat in the end simply did not do so. Very few drivers charged with drunk driving offenses where jail was threatened actually went to jail.

Another approach which has been advocated by some is the "decriminalization" of drunk driving offenses. Advocates of this position argue that in order to make drunk driving convictions swifter and more certain, penalties must be reduced to the level of common traffic infractions or, alternatively, that those charged with drunk driving should be made subject to an immediate administrative license proceeding based on the finding that the offender had a BAC of 0.10 or more.

Advocates of the decriminalization approach argue that it would provide for an enforceable drunk driving law, by making it easier to convict offenders of the charges they face. The reasoning goes that if DWI was an ordinary traffic infraction, drivers would have a smaller incentive to try to avoid prosecution.

Advocates of the administrative mechanism argue that that approach would result in the sure imposition of a license suspension before the completion of the criminal process. By avoiding the criminal process, these advocates argue that those charged could not delay the application of license suspensions in their cases.

Yet, both these decriminalization approaches face fatal flaws. The traffic ticket approach would "work" because it would be so weak that it would provide no meaningful deterrent to the drunk driver. Drunk driving laws which treat the offense as a routine one will have little more effect than current penalties for overtime parking. Those advocating this point of view fail to recognize that the real problem with most states' drunk driving penalties is that, in reality, they are so small as to amount to de facto decriminalization.

The alternative decriminalization approach, the development of a parallel administrative license suspension proceeding in these cases, creates a whole new set of problems.

First, the proposal removes license suspension and eligibility for entry into the State's drinking driver program from the judicial process. That decreases the ability of the district attorney to offer a satisfactory incentive to the defendant to settle his case without going to trial.

Second, this proposal sets up a parallel administrative proceeding which operates independently of the judicial process. That adds to the expense of settling drunk driving cases and requires a large increase in the number of administrative hearing officers.

Third, by focusing on the license suspension as the primary sanction against drunk drivers, this proposal relies on the weakest available penalty. Unfortunately, a very large number of drivers continue to drive, despite a license suspension or revocation. California research showed more than 60 per cent non-compliance with this penalty.

Our approach represents a middle ground between the extremes of jail and decriminalization. We recognized that New York's existing fines were simply too low. So, we established a new set of mandatory minimum fines, ranging from $250 to $500. Maximum fines for chronic offenders run as high as $5,000. This new fine schedule means that all drunk drivers will receive a sustantial and inescapable financial penalty. A key element of this approach was to continue to allow offenders to plea bargain to a lesser alcohol offense, but to increase the penalties for all alcohol offenses to the extent that in cases where a drunk driver is convicted of the lesser drunk driving offense, he will be subject to a fine of at least $250 and license action.

I believe this approach has three advantages. First, it does not raise the problems that courts have with putting so-called "good citizens" in jail. Second, rather than penalizing the taxpayer, it penalizes the drunk driver. Third, coupled with permissive jail penalties and license action through the judicial process, this approach tells the convicted drunk driver that he has committed a crime and will surely suffer a substantial penalty.

So far, I have talked about three parts of our legislative response to the drunk driving problem: Educating the public; the establishment of a legal framework to make possible the effective prosecution of these cases; and the establisment of appropriate penalties.

Involving Local Government

The final element of our response as I see it is the establishment of a mechanism to ensure that those who are responsible for applying the laws give drunk driving a high priority. They must make the public aware that they will be subject to a substantial risk of being caught and prosecuted if they go ahead and drive when they are drunk. Since this responsibility belongs to local agencies - counties, cities, towns and villages - I wanted to find a way to ensure that drunk driving became a local priority.

Our response was the establishment of New York's STOP DWI program. This program rests on the notion that the most appropriate source of funds to finance anti-drunk driving activities is the drunk driver - and only the drunk driver.

We set up a scheme by which counties could, at their option, establish plans to combat drunk driving. The plans were to reflect local needs for more enforcement, prosecution, or education, but they could not simply be designed to fund existing programs at their ongoing level. Instead, they must provide for increased anti-drunk driving activity. Following plan approval by the State Department of Motor Vehicles, the counties will receive this fine money. We estimate that this mechanism will provide localities nine million dollars in its first year for drunk driving activities. Thus, our response to the third part of the drunk driving problem - STOP DWI - recognizes that ultimately, the response to drunk driving takes place at the local level and that if our laws are to be more effective, drunk driving must become a local priority.

Assisting this local effort is New York's Traffic Safety Law Enforcement and Disposition system. That system provides localities with centralized State management and accountability of traffic violations records. At the same time, it will generate statistics on drunk driving violations and crashes that will allow communities to evaluate the effectiveness of their STOP DWI programs. Unfortunately, TSLED's future is in doubt because of the Governor's veto of funds for this program.

[ATTACHMENT A]

HIGHWAY SAFETY AND THE IMPAIRED DRIVER

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LAW ENFORCEMENT AND THE DRUNK/DRUGGED DRIVER

It is a national scandal that 50,000 Americans are killed, and 2,000,000 people suffer disabling injuries in motor vehicle accidents each year. The National Highway Traffic Safety Administration grimly predicts that with today's trend toward smaller automobiles, and the increasing number of trucks on our highways to replace our dying railroad system, the annual death toll will reach 70,000 by the end of the 80s.

The greatest tragedy is that we have become desensitized to the meaning of these deaths. We have come to accept this carnage as the unfortunate price we pay for the mobility we enjoy from the automobile. Worse still, if we look behind the statistics, we will find that at least half of this bloodshed results from our unwillingness to put a halt to the most frequently committed violent crime in this country: drunk driving.

When Jim Murphy asked me to speak on the subject, "Law Enforcement and the Drunk/Drugged Driver," I wrote letters to many of our commissioners of public safety and superintendents of state police to obtain their thoughts on this subject. The response was very good and all of them said pretty much the same thing. And I concur with their responses. The thing that we hear and the experience that we have had indicate that the most important thing is the deterrent effect of swift and sure punishment. A law enforcement officer, first of all, wants his arrest to be upheld by the courts, and second, he wants the offender to be punished.

You are aware that the big problem in law enforcement today is the leniency that both society and the courts have toward the drunk driver. For some reason the public becomes very excited and the newspapers print front page stories when a person kills four or five people with a gun. But let the same person drive a motor vehicle while drunk and collide head-on into a family of four or five, killing all of them, and we hear very little. And then, only from family members. The newspapers may carry the story on page ten. The drunk driver is usually fined less than $100 by the court and he may lose his driver's license, if he is not a first offender, for 90 to 180 days depending on state law. Whereas in the case of the gun killing, (now called murder) the death penalty or life imprisonment is usually asked for by the district attorney. Why the leniency that both society and the courts have toward drunk driving?

Most traffic enforcement officers would simply like to see sanctions against drunk drivers applied equitably and consistently. Most states have adequate laws now to deal with this problem if judges would use the punishment now available. Certainly, I would like to see drunk/drugged driving laws further improved by increasing fines and mandatory jail time.

The most effective tool against the drinking driver is for the public to become aroused enough to demand that law enforcement agencies, and the courts, treat the drinking driver problem as the serious menace it has proven to be. Mothers Against Drunk Driving (MADD) will have a very obvious impact on the courts' handling of drunk driver cases. It may not be practical now to jail every convicted drunk driver, but at least these ladies are demanding that the courts tighten up their procedures for punishing a drunk driver. Sooner or later a turnaround will occur. Then, instead of using kid gloves on the first offender we lock him up! This action will probably shake him into the reality that we are going to do this each and every time we arrest him. Today he knows that he's probably only going to be fined a small sum and allowed to retain his driver's license. This causes him to think that since he got away with it the first time that he can get away with it the second time. Let's stop the problem in the beginning. It is not the penalty but the fear of the penalty that prevents violations.

I do not feel that alcohol safety education programs have proven to be a successful deterrent against drunken drivers. The motive behind the DUI counterattack programs may be good, but the proponents are simply fooling themselves if they feel such programs will make a noticeable dent in the drunk driving problem. As an example, Mississippi State University has received a total of $1,148,000 in federal grants for alcohol safety education. In their evaluation of their DUI probation follow-up program, they concluded that, in terms of 1980 dollars, the costs greatly outweighed the benefits derived from the project. This was based on a study of the reduction in accidents and injuries. They found out that the recidivism rate of these offenders was 89 per cent higher than that of the offenders classified as non-problem drinkers. The accident rate was 60 per cent higher for these drinkers, the injury rate was 190 per cent higher, and the serious injury rate was approximately 350 per cent higher.

The first thing our legislators need to do is make it impossible for a judge to legally alter a DUI charge to a lesser offense. Changing the law will not be 100 per cent effective, but it will apply tremendous pressure on a judge to follow the law, especially if the citizens are interested in his handling of DUI cases. We haven't been bashful in filing formal complaints against judges who we feel are not complying with the law. Most states have now established .10 per cent as the presumptive level. The word presumptive should be dropped, then when a person exceeds .099 per cent, he is drunk and no further decision needs to be made.

In our department we can track our courts because all traffic citations are entered in our computer system. We gather information from these citations as to conviction rates, fines, etc. We also furnish to our enforcement supervisors a listing of any citations that are 30 days old. He can check with the judge to determine the disposition. This system prevents a citation from being sidetracked or lost. This has helped us increase our conviction rate to 92 per cent. Our state auditor also uses this information to keep a close check on collection of fines, etc.

Another improvement would be to raise the drinking age back to twenty-one. Studies support the notion that when the drinking age is raised, alcohol involvement among teenager drivers goes down with a corresponding drop in fatal traffic accidents.

We would like to see laws passed that provide both criminal and civil sanctions against servers of alcoholic beverages, whether they are commercially licensed or social hosts, when their act contributes to the injury of a third party. We need to emphasize the concept that even though much of our social activity revolves around the alcoholic drink, those who serve it must bear a part of the consequences if injury or death of an innocent person results.

We would also like to see community leadership, business, civic, church, and political groups depopularize the trend toward drinking and driving. I know a majority of the public drinks, but the same majority would not advocate drinking and driving. If we ever hope to curb drinking and driving, the leadership drive must be shared by influential persons outside of law enforcement circles.

Newspapers can perform a service by reporting on case dispositions from local courts, especially DUI cases. When people become concerned enough to demand prompt and equitable handling of these cases, then we will see a reversal of the trend.

Another problem is the reluctance by district attorneys to allow drunk driving cases to be heard by a jury. The courts complain about overloaded dockets, but I believe if a jury sits in judgment of an individual charged with DUI, others who consider an appeal may have second thoughts before appealing lower court convictions. It is ironic that the same district attorneys who are soft on DUI cases are prompt in seeking murder indictments against a driver who has caused a traffic death while driving under the influence. It's like "closing the barn door after the horse gets out." I wish these district attorneys were as eager to prosecute a DUI charge as they are to press charges after a tragic accident.

We will not make inroads into this problem until our citizens decide they are fed up with the needless slaughter and maiming on our highways because of

drunk driving. When they demand action and monitor the various segments of the justice system to insure that appropriate countermeasures are taken, then we will see results. As long as the prevailing attitude is "everybody does it," and, "it's really not that bad," we will continue to experience this problem.

Another excellent deterrent that hasn't been used extensively is strong punishment for those drivers who drive after license revocation. We are far too lenient on those drivers. A law impounding the vehicle driven by a revoked driver would drive home the point that when the driving privilege is removed, then that person must refrain from driving or suffer other sanctions.

One problem law enforcement officers experience is the amount of time spent to arrest a drunk driver. By the time the individual is stopped; a preliminary roadside test is given; his rights are read to him; an attempt is made to get him to understand what the officer is saying; get him to jail; give him a breathalizer or intoxalyzer test; and go through all the other procedures involved; the officer has spent about two hours arresting one drunk.

If federal dollars could be put into equipment such as the small, handheld, breath-testing device at a cost of $300 each, more officers would check suspected drinking drivers at the stop site. These small units are very accurate and indicate whether the individual is above or below the DUI level.

Also needed are intoxalyzer vans. These vans are mobile, alcohol-testing vehicles operated by an officer, and include testing devices, a holding cell, and other necessities for testing and holding drunks. These units could be used by officers in each troop to reduce arrest time. The officers would arrest drunks if they could reduce the time needed per arrest. In trouble spots an officer stopping a drunk driver could radio for the van, which would come to the scene, pick up the drunk, administer the test, and then transport the drunk to jail. This system has been used very successfully in several states. The officer's time in arresting a drunk is reduced from about two hours to less than fifteen minutes, leaving him free to return to patrol duty. Many law enforcement officers are not enforcing the drunk driving laws because of the time involved. There are also many other violations occurring that need their attention.

The officer is frustrated by the leniency of the courts in punishing drunk driving. Why arrest the drunk if he is going to be allowed to keep right on driving? We will never be successful in controlling drunk/drugged drivers until they believe that there is a reasonable certainty that if they do drive under the influence that they will: (1) be detected, (2) be arrested, and (3) be given an appropriate punishment for the offense.

Our federal legislators, like their state counterparts, should recognize drunk driving for what it is -- a willful and malicious act. Congress can best support this effort by funding programs. Funding priority should be given to the National Driver Register in order to support an on-line capability. This service will allow the states to track down drivers and prevent them from moving from one state to another to obtain a driver's license. Also, Senate Bill No. 2158 should be passed by Congress. This bill embodies the drunk driving programs advocated by Senator Danforth when he served as attorney general of Missouri. It encourages the states to qualify for additional federal highway funding by adopting two mandatory administrative procedures aimed at keeping drunks off our highways. Automatic license suspension, and seizure and impoundment of vehicles operated by individuals after their driving privileges have been revoked for an alcohol offense. This would provide a solid foundation for state and local drunk driving programs.

Federal funds are now being given to the states to enforce the 55 mile-per-hour speed limit. In addition, similar funds are available to states that have a selective traffic enforcement program. This program has worked in problem areas which include drunk driving. The funding permits states to pay their officers for working on their days off. In our state this has allowed us to use our trained officers to moonlight in the field in which they have been trained. It has been the equivalent of hiring 75 more officers. These officers operate separately from regular patrol and are concentrated on the problem driver.

Additionally, our troop headquarters utilize accident "spot" maps for indicating problem areas. Map pins are used to show accident locations. Different colors indicate different accident causes. Time, location, and cause puts the officer at the trouble spot at the correct time and tells him to look for the accident causing problem. By using these maps we have been successful in apprehending 40 per cent more drunks and lowering our fatalities on state and federal highways by 17 per cent between 1980 and 1981.

The use of these teams, especially on weekends, has caused a noticeable change to take place. The end result is fewer drunks driving motor vehicles on our streets and highways. The addition of these officers working on their days off allows regular shift assignments to carry out their routine duties. The system has worked. The result has been lives saved.

Too many lives have already been lost for us to temporize any longer. We cannot give up. I see many indications that the public is fed up with the drinking driver. I see stiffer penalties coming out of our legislatures regarding this group of motorists. If this occurs, we may have won the ball game, but even if we work hard, it will take time for us to get back where we need to be. I believe it is just around the corner. No state,

acting by itself, can keep drunks off our highways. It will take all of us from both the private and public sector to reduce this problem. With over 25,000 people killed on our highways each year in alcohol-related accidents we must start now.

We have come a long way, but we still have a long way to go. If Congress and our state legislators will give us the funds, the proper tools, and the laws we need, we can turn this disgrace around and make our streets and highways a safer place to travel.

[ATTACHMENT A]

BRIAN O'NEILL

Vice President - Research

Insurance Institute for Highway Safety

Washington, D.C.

VEHICLE SAFETY - A MARKETABLE COMMODITY

The current public concern with alcohol-related crashes presents an opportunity to increase the public's awareness that motor vehicle crash deaths and injuries can be reduced in a number of ways. It is important to realize that, while no single program will be sufficient to solve this problem, a balanced approach with programs aimed at drivers, vehicles and the environment is needed. More effective programs aimed specifically at alcohol-impaired drivers should be an important part of such a balanced approach. Along with them, however, we must also vigorously seek out and implement other ways to reduce the appalling numbers of motor vehicle crash deaths and injuries.

Increasingly, the grass roots organizations set up to combat drunken driving are recognizing that child restraint laws, improved vehicle crash design, etc. can reduce the numbers of deaths and injuries caused by alcohol-impaired drivers. The New York State Governor's Alcohol and Highway Safety Task Force, in addition to proposing major changes in the driving-while-impaired laws and enforcement, also recognized the importance of improving vehicles and highways, and, for example, endorsed "the strongest possible measures by the federal government to mandate installation of passive restraint systems in all new cars."[1]

Government action is not the only answer, however. The time is overdue for the marketplace to offer and promote vehicle occupant protection features that have been technologically feasible and practical for a long time but are not being sold to the public. One of the most enduring myths in the United States is that safety does not sell cars. This myth is based on Detroit folklore concerning the 1956 model year Fords. In that year, faced with restyled Chevrolets, Ford -- in a last-ditch effort to salvage sales for its uncompetitive models -- decided to stress safety in its advertising campaign. But Ford cars did not sell especially well, compared to Chevrolets, which is the basis for the "safety doesn't sell" myth. The relatively poor showing of the 1956 Fords is invariably attributed to the advertising campaign, even though it was reported that Ford officials themselves estimated without the campaign about 200,000 fewer Fords would have been sold.

What has been too often overlooked about the 1956 Ford experience is that the auto company could not keep up with the demand for the optional seat belts it was offering as part of its "safety" advertising effort. According to Ford, the belts generated a demand "considerably higher than originally anticipated."[3] In addition, crash padding, which was also an option on 1956 Fords, had the most successful first-year sales of any optional feature. Forty-three per cent of all 1956 Fords were ordered with safety padding. This contrasts with sales of tinted glass, which was ordered on only 6 per cent of cars in its first year, and automatic transmissions, which were ordered by only 23 per cent of customers when it was introduced.[3] It is difficult to reconcile these facts with the myth that "safety cannot be sold."

Additional evidence that safety can influence car sales is the fact that detrimental information about the safety performance of particular cars has seriously hurt their sales. For example, adverse publicity about the safety of the Chevrolet Corvair directly contributed to its demise. Similarly, widespread negative publicity concerning deficiencies in the fuel tanks of Ford Pintos was responsible for the significant decline in sales of that car. Clearly, adverse publicity concerning the safety performance of particular cars can produce a negative image for that particular make and model which translates into reduced sales.

There is also evidence that positive findings or publicity concerning the safety of particular makes and models could translate into a positive image which in turn would lead to increased sales. A number of opinion polls and attitude surveys of prospective car purchasers have indicated that safety, although not usually the overriding factor in a potential purchase decision, is an important consideration that can positively influence new car purchase decisions.[4-6]

Even if it were reasonable to assume that the poor sales of 1956 Fords were partially due to the safety advertising campaign, it still is not reasonable to assume that factors that may have influenced automobile purchasing behavior a quarter of a century ago are relevant today. Twenty-five years ago, the image of the automobile was quite different than it is today and there are many reasons to believe that passenger cars are increasingly considered for their practical features rather than for sex appeal, image, etc. The recent emphasis on fuel economy and quality is an example of this shift.

The growth in small car sales presents an ideal opportunity to market occupant protection features. An oft-voiced concern of prospective small car purchasers involves the poor safety records of such cars -- and this concern is based on fact. The substantially higher risk of death and injury to occupants of small cars has been repeatedly documented. In recent months, thanks in large part to the major effort undertaken by USAA, such findings have received a great deal of publicity.[7,8]

The growth of small car sales makes it urgent that technology to improve the capability of passenger cars to protect their occupants be offered in the marketplace. This technology has been long available, and much of it is not particularly expensive. In order to reduce passenger car occupant crash deaths and injuries, the occupant compartments of all cars should be designed to minimize the likelihood of:

1. Occupant ejection. The designs of locks, latches and window glass are crucial.

2. Occupant compartment intrusion. The strengthening of the compartment and the energy-absorbing characteristics of its surrounding structure are critical.

3. Occupant impact with hostile structures inside the compartment. Steering column, windshield, and dashboard designs, together with occupant restraints, both manual and automatic, are important.

Depsite the fact that occupant ejection has been known for decades to be one of the most hazardous events that can occur during a crash, about a quarter of the passenger car occupants who are killed in recent model year small cars still are ejected. This is despite the fact that substantially improved anti-burst door lock designs are available. Although such designs may be somewhat more expensive than the designs that are currently used, they could be offered as optional items.

Since occupant compartment intrusion occurs more frequently in small cars than in large cars, the use of designs to minimize this hazard is increasingly important. The federal government's Research Safety Vehicle program demonstrated that substantially improved technologies and designs that more effectively absorb and manage crash energy and thus reduce the likelihood of such intrusion could be applied without major costs.[9, 10]

There are obviously many ways to reduce the injuries and deaths that result from occupants striking hostile interior structures -- seat belts and airbags being the most conspicuous examples. But, we are all aware of the problem with manual seat belts -- they are rarely used; for a variety of reasons, the vast majority of the American public will not wear them. Reasons cited for nonuse include discomfort, inconvenience, forgetting, etc.[11] The evidence is clear that there is no way short of vigorously enforced laws to achieve high levels of manual belt use. For this reason, automatic restraints such as air bags and automatic seat belts are attractive improvements over manual seat belts. Volkswagen has successfully marketed an automatic belt for many years in its Rabbit models, and a substantial number of Rabbits on the road today have this improved seat belt system. Air bags on the other hand, are still not available, either as standard equipment or an optional item, on any car sold in the United States. They are available as options on certain Mercedes Benz models in Europe, and reportedly are selling extremely well.

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General Motors (GM) did briefly offer air bags as optional items on a number of its 1974 through 1976 luxury or semi-luxury models. The fact that only 12,000 cars were sold with this option has often been cited as proof that the American public does not want air bags. In fact, the GM air bag option was first offered in the middle of the 1974 model year on expensive, gas guzzling models at the height of the first serious gas shortage. Furthermore, by the time the air bag was offered, GM had changed its management and its attitude toward this option, and through a variety of ways, actually discouraged sales. This fact is well-documented in a 1976 article in the Wall Street Journal.[12]

Another interior design feature being sold in Equope but not yet available in the United States is the Securiflex windshield, which has an additional very thin layer of plastic on the inside of the glass -- nearest the occupant compartment -- to reduce the likelihood that occupants whose heads and faces strike it during a crash receive serious lacerations to their faces and heads. Conventional windshields, with a layer of glass nearest the occupants' faces, are much more likely to cause serious lacerations when occupants hit them in crashes.[13]

The fact that air bags and Securiflex windshields are available in Europe but not in the United States is a tragedy. It is apparent that there has been more effort -- including by the overseas operations of domestic car manufacturers -- to sell occupant protection features in Europe than in the United States. For example, Eruopean sales literature on the Ford Fiesta emphasized the safe location and design of its gas tank. This was at the same time that the Ford Pinto's hazardous gas tank design was being widely publicized in the United States. As mentioned earlier, Mercedes is successfully selling air bags as an optional feature on cars outside the United States. And, non-lacerating windshields on several European models have in some instances been extensively advertisied. There is no reason to believe that European consumers are more intelligent than consumers in this country. If occupant protection features can be sold in Europe, surely they can be in the United States too.

The efforts of insurers have played a major role in encouraging consumers to consider safety when they buy cars. In the early 1970s, Allstate ran ads praising SAAB for selling the first car in the United States with 5 mph bumpers. In the mid-1970s, Allstate also advertised the GM air bag option. More recently, the American Insurance Association has been running ads promoting the research safety vehicle technology and, of course, there has been the major publicity generated very recently by USAA about the hazards of small cars.

The federal government's 35 mph crash tests have also generated considerable publicity concerning occupant protection. This, in turn, led a group of Chevrolet dealers to run a series of ads emphasizing the superior performance of the Chevrolet in such tests. Fiat also advertised the performance of their

Brava. The compilation of these and other safety and damagability-related results in the government's Car Book resulted in this being the most requested government publication ever.[14]

The most encouraging sign that safety does sell cars is directly attributable to USAA publicizing Insurance Institute for Highway Safety and Highway Loss Data Institute results concerning small cars -- namely, the series of ads taken out by General Motors to advertise these results in more than 300 newspapers and magazines with an estimated readership over 100 million.[15]

Let us hope that these ads mark the beginning of the end of the myth that safety doesn't sell, and that the marketplace will soon offer occupant protection features such as air bags, anti-lacerative windshields, and other occupant protection features. Without these, there is every reason to believe that the present appallingly high rate of passenger car occupant deaths will increase.

FOOTNOTES

1. New York state study, 1968, prepared for the Department of Transportation. (Submission for the Record by U.S. Department of Transportation to U.S. Subcommittee on Antitrust and Monopoly, March 10, 1979.)

2. Nader, R. Unsafe At Any Speed (Updated). New York: Grossman Publishers, 1972.

3. Haynes, A.L. (Ford Motor Co.). Statement Before the House of Representatives, Special Subcommittee on Traffic Safety of the Committee on Interstate and Foreign Commerce, Washington, D.C., August 6, 1957.

4. Kernish, R. (National Analysts). Title II Consumer Survey. Final Report to U.S. Department of Transportation, National Highway Traffic Safety Administration, July 1981. USDOT-NHTSA Docket No. 79-17-NPRM-NO1-177..

5. All-Industry Research Advisory Council, Public Attitude Monitor 1981. Bethesda, MD: All-Industry Research Advisory Council, Research Report A81-4, December 1981.

6. Hart, P.D., Associates. Public Attitudes Toward Passive Restraint Systems. Final Report to USDOT-NHTSA, August 1978. Springfield, VA: National Technical Information Services, DOT HS-803-570.

7. Insurance Institute for Highway Safety, Status Report, A Special Issue, Vol. 17, No. 1, January 5, 1982.

8. Haddon, W., Jr., "How Safe is Your Car?" Aide, Special Report, 1982.

9. Friedman, D. "The Minicars Research Safety Vehicle." Proceedings of the Eighth International Technical Conference on Experimental Safety Vehicles, October 21-24, 1980, p. 55-76. Washington, D.C.: U.S. Department of Transportation, National Highway Traffic Safety Administration.

10. Fabian, G. J. "Compatibility in the Calspan Research Safety Vehicle." Proceedings of the Eighth International Technical Conference on Experimental Safety Vehicles, October 21-24, 1980, p. 153-166. Washington, D.C.: U.S. Department of Transportation, National Highway Traffic Safety Administration.

11. Newport, F.M. and Tarrance, V.L., Jr. (Tarrance and Associates). National Safety Belt Study. Report on Contract DTNH22 81C 05224. USDOT NHTSA, September 1981.

12. Karr, A.R. "Saga of the Air Bag, Or the Slow Deflation of a Car-Safety Idea." The Wall Street Journal, November 11, 1976.

13. Insurance Institute for Highway Safety. "Faces in Crashes," 16mm film, copyright 1981.

14. U.S. Department of Transportation, National Highway Traffic Safety Administration The Car Book Washington, D.C. DOT-HS-805-580, December 1980.

15. General Motors Corporation, Annual Report 1981, p. 33.

[ATTACHMENT B]

National Association of Independent Insurers

499 SOUTH CAPITOL ST., S.W., SUITE 401, WASHINGTON, D. C. 20003
202/484-2350

Darrell Coover
Vice President-Government Relations

May 5, 1982

The Honorable James J. Howard
Chairman
Committee on Public Works and Transportation
U. S. House of Representatives
2165 Rayburn House Office Building
Washington, D. C. 20515

Dear Chairman Howard:

The National Association of Independent Insurers, an insurance trade association of more than 500 property and casualty insurers which write nearly half of the nation's automobile insurance, is pleased to submit this statement in support of legislation you are considering to curb drunk driving.

NAII strongly supports Rep. Oberstar's bill, H.R. 2052, which will provide for an improved driver register system to assist states in screening new license applicants. We also support the concept of incentive grants contained in the Howard-Barnes Bill, H.R. 6170, which would assist states developing comprehensive drunk driver programs.

Attached is a copy of our letter to Subcommittee Chairman Anderson which fully explains our position on these important bills.

We appreciate the opportunity to present our views on this very serious problem and applaud your efforts to secure passage of legislation to improve the National Driver Register and curb drunk driving.

Sincerely,

Darrell Coover

Darrell Coover
Vice President-
Government Relations

Enclosure

[ATTACHMENT B]

National Association of Independent Insurers

499 SOUTH CAPITOL ST., S.W., SUITE 401, WASHINGTON, D. C. 20003

202/484-2350

Darrell Coover
Vice President-Government Relation

April 30, 1982

The Honorable Glenn M. Anderson
Chairman
Subcommittee on Surface Transportation
Public Works and Transportation
House of Representatives
Washington, D. C. 20515

Dear Chairman Anderson:

The National Association of Independent Insurers, an insurance trade association of more than 500 property and casualty insurers which write nearly half of the nation's automobile insurance, is pleased to submit this statement in support of legislation you are considering to curb drunk driving.

NAII strongly supports Rep. Oberstar's bill, H.R. 2052, which will provide for an improved driver register system to assist states in screening new license applicants. We also support the concept of incentive grants contained in the Howard-Barnes bill, H.R. 6170, which would assist states developing comprehensive drunk driver programs.

At hearings held April 28 and 29, your subcommittee heard a variety of witnesses describe the seriousness of the drunk driver problem in this country and the staggering costs to society of traffic accidents which are caused by drunk drivers. The problem is compounded, of course, by the fact that often law enforcement is lax, the criminal justice system too lenient and rehabilitation programs scarce. Further, only a small percentage of those who drink to excess and drive are ever caught and prosecuted, and even fewer are convicted. Finally, society's toleration of drunk driving makes it even more difficult to combat. We are encouraged, however, by the recent efforts of legislators, concerned citizens and business groups to change these attitudes and promote positive programs to deter drunk driving.

NAII is very concerned about the drunk driver problem. Because of our concern, we produced a film to show to school children on the dangers of driving while impaired by drugs and/or alcohol. We are disheartened by the latest research which shows that the old laws and methods of dealing with the drunk driver

problem have not been effective in reducing alcohol-related accidents. For this reason, we spent an entire day at our annual workshop session last week exploring effective countermeasures to combat drunk driving and ways in which insurance companies can get further involved in these efforts.

A representative of one NAII member company - GEICO - has already reported to the subcommittee on its successful "LIFT" program whereby employees are encouraged to offer free transportation home, with no questions asked, to persons they feel should not be driving because they are intoxicated. Other such voluntary efforts are planned or underway.

According to H. Laurence Ross, who recently completed a major study of the problem for the National Highway Traffic Safety Administration, the most promising deterrent approach involves increasing efforts to apprehend impaired drivers and give them swift and certain penalties, not just making penalties more severe. A key element in deterrence is changing people's perceptions about whether they will be caught and promptly punished for drunk driving. In the final analysis, this can be accomplished only by state and local officials at the local level.

NAII supports the general concept of providing federal incentive grants to assist states developing comprehensive drunk driving programs to assure swift and certain punishment of offenders. Although the funding for such programs will be small because of budgetary constraints, enactment of such legislation would send an appropriate signal to the states about the federal government's interest in the seriousness of the problem and the government's willingness to assist in efforts to attack the problem. We do believe, however, that each state should be free to develop the types of drunk driving countermeasures it feels will be most effective at the local level and that they should not be required to meet rigid and specific federal minimum standards to qualify for such funding.

We also believe there is a further limited role which the federal government can assume in this battle against drunk driving. NAII strongly supports legislation which would provide for the funding and improvement of the National Driver Register system (NDR) to assist the states in locating information about problem drivers at the time they apply for a license. While NAII would prefer that the states, rather than the federal government, maintain and operate such a system, the NDR is currently established and operational at the national level within the Department of Transportation, and the states are currently not prepared to carry on the program.

We recognize that the NDR, as it is currently operating, is often incomplete and slow. However, we believe the NDR amendments which will change the government's role from being a data collector to a "switching station" and will change the system from a manual to a computerized program will result in an efficient and fast system which will assist the states in ferreting out problem drivers. An improved NDR should help keep convicted drunk drivers off the road by making it difficult for them to get licenses in other states during the period of license revocation.

We appreciate the opportunity to present our views on this very serious problem and we applaud your efforts to secure passage of legislation to improve the National Driver Register and curb drunk driving.

Sincerely,

Darrell Coover
Vice President-
Government Relations

[ATTACHMENT B]

National Association of Independent Insurers

499 SOUTH CAPITOL ST., S.W., SUITE 401, WASHINGTON, D. C. 20003

202/484-2350

Darrell Coover
Vice President-Government Relations

April 26, 1982

The Honorable John C. Danforth
United States Senate
Washington, D. C. 20510

Dear Senator Danforth:

The National Association of Independent Insurers, an insurance trade association of more than 500 property and casualty insurers which write nearly half of the nation's automobile insurance, is pleased to submit this additional statement on S.2158, legislation designed to combat drunk driving.

NAII strongly supports Title II of S.2158, recently approved by the Senate Commerce Committee, which will provide for an improved driver register system to assist states in screening new license applicants. We also support the general concept of Title I's incentive grant program which would assist states developing comprehensive drunk driver programs, but we believe the states should not be required to qualify for such funding by meeting rigid and specific federal minimum standards.

At hearings held March 3, 1982, your Commerce Subcommittee on Surface Transportation heard a variety of witnesses describe the seriousness of the drunk driver problem in this country and the staggering costs to society of traffic accidents which are caused by drunk drivers. The problem is compounded, of course, by the fact that often law enforcement is lax, the criminal justice system too lenient and rehabilitation programs scarce. Further, only a small percentage of those who drink to excess and drive are ever caught and prosecuted, and even fewer are convicted. Finally, society's toleration of drunk driving makes it even more difficult to combat. We are encouraged, however, by the recent efforts of legislators, concerned citizens and business groups to change these attitudes and promote positive programs to deter drunk driving.

NAII is very concerned about the drunk driver problem. Because of our concern, we produced a film to show to school children on the dangers of driving while impaired by drugs and/or alcohol.

We are disheartened by the latest research which shows that the old laws and methods of dealing with the drunk driver problem have not been effective in reducing alcohol-related accidents. For this reason, we are planning to spend an entire day at our annual workshop session April 26-28 exploring countermeasures which might be effective in combating drunk drivers, as well as ways in which insurance companies might get even further involved in these efforts.

A representative of one NAII member company - GEICO - has already reported to the subcommittee on its successful "LIFT" program whereby employees are encouraged to offer free transportation home, with no questions asked, to persons they feel should not be driving because they are intoxicated. Other such voluntary efforts are planned or underway.

According to H. Laurence Ross, who recently completed a major study of the problem for the National Highway Traffic Safety Administration, the most promising deterrent approach involves increasing efforts to apprehend impaired drivers and give them swift and certain penalties, not just making penalties more severe. A key element in deterrence is changing people's perceptions about whether they will be caught and promptly punished for drunk driving. In the final analysis, this can be accomplished only by state and local officials at the local level.

NAII supports the general concept of providing federal incentive grants to assist states developing comprehensive drunk driving programs to assure swift and certain punishment of offenders. Although the funding for such programs will necessarily be less because of budgetary constraints, enactment of such legislation would send an appropriate signal to the states about the federal government's interest in the seriousness of the problem and the government's willingness to assist in efforts to attack the problem. We do believe, however, that each state should be free to develop the types of drunk driving countermeasures it feels will be most effective at the local level and that they should not be required to meet rigid and specific federal minimum standards to qualify for such funding.

We also believe there is a further limited role which the federal government might assume in this battle against drunk driving. NAII strongly supports Title II of S.2158, which would provide for the funding and improvement of the National Driver Register system (NDR) to assist the states in locating information about problem drivers at the time they apply for a license. While NAII would prefer that the states, rather than the federal

government, maintain and operate such a system, the NDR is currently established and operational at the national level within the Department of Transportation, and the states are currently not prepared to carry on the program.

We recognize that the NDR, as it is currently operating, is often incomplete and slow. However, we believe the NDR amendments which will change the government's role from being a data collector to a "switching station" and will change the system from a manual to a computerized program will result in an efficient and fast system which will assist the states in ferreting out problem drivers. An improved NDR should help keep convicted drunk drivers off the road by making it difficult for them to get licenses in other states during the period of license revocation.

We do have three changes to suggest to the April 16 staff working draft which was provided to us by your staff for our comments. First, we believe §203(c)(iii) should be clarified to permit the Secretary to retain identifying information (not substantive details) on offenders once the Register becomes computerized. Second, we agree with the American Association of Motor Vehicle Administrators that the NDR Advisory Committee should not be dropped from the bill or relegated to a subcommittee of the Highway Safety Advisory Committee as provided by §209. Third, we think the Secretary's Report on the effectiveness of the NDR required in §210 should be required to be submitted after the pilot project report required by §207(f), not before.

We appreciate the opportunity to further amplify our views on this very serious problem and we applaud your efforts to secure passage of legislation to improve the National Driver Register and curb drunk driving.

Sincerely,

Darrell Coover
Vice President-Government Relations

[ATTACHMENT C]

NAII NEWS National Association of Independent Insurers
2600 RIVER ROAD, DES PLAINES, ILL. 60018-3286 • CHARLES J. LORENZ, VICE PRESIDENT, PUBLIC RELATIONS • 297-7800

FOR RELEASE ON RECEIPT

NAII OFFERS NEW FILM ON MARIJUANA AND DRIVING

DES PLAINES, ILL. -- An estimated 40 per cent of today's teenagers and young adults drive while high on marijuana, failing to realize that marijuana impairs the specific skills and perceptions needed for safe driving. They consider it to be a harmless drug, and some actually believe that they drive better when they are high, than when they are straight.

The National Association of Independent Insurers has produced a film to help correct these misperceptions by depicting the effects of marijuana on driving abilities. The 22-minute film, entitled Danger Ahead: Marijuana on the Road, is now available for purchase by insurance companies and agents.

Narrated by Jason Robards, the film explores in documentary fashion the personal experiences of teenaged and young adult users as well as the opinions of medical experts. It illustrates the hazards of driving under the influence of marijuana and under the influence of marijuana and alcohol combined. The information is presented in a manner which helps the marijuana user, or potential user, to make an educated decision.

NAII produced the film in an effort to engage the cooperation of teachers, community leaders, civic groups and the insurance industry in bringing this problem to the attention of young people. Judging from viewers' comments, the film's message is well-received by teenagers and young adults. Students note that the film is "realistic and impressive," and accept the information presented because "it's not pushy or preachy." Teachers and parent groups also give the film an enthusiastic reception. "Very informative, well-prepared and a timely topic," observed one community club.

Danger Ahead: Marijuana on the Road is available in 16 mm for $194 and 3/4" videotape cassettes for $65 a copy. Agents and companies interested in purchasing a copy of the 22-minute, color film may contact Millicent Treloar, National Association of Independent Insurers, 2600 River Road, Des Plaines, Illinois 60018 (phone: 312-297-7800, ext. 214).

[ATTACHMENT D]

Perspective

Chicago Tribune Wednesday, June 9, 1982

Point of View

A life-saving decision

By Lowell R. Beck

LAST WEEK'S decision by the U.S. Circuit Court of Appeals to reinstate federal passive restraint regulations for new cars is a momentous victory for auto safety, but what does it mean specifically to the public?

First, assuming that the National Highway Traffic Safety Administration (NHTSA) does not appeal the court decision and presses ahead with compliance from Detroit, it means that all new cars, starting with 1984 models, will be equipped with crash protection of some kind. It may be air bags or seat belts that automatically wrap around front-seat occupants, but increased safety protection will be a feature of all new cars.

Second, it means a substantial reduction in the outrageous carnage that takes place every day on our streets and highways. Experts have predicted that when all cars have crash protection, as many as 10,000 lives could be saved annually and tens of thousands of serious injuries prevented.

THIRD, IT MEANS lower costs. It has been conservatively estimated that the passive restraint standard, when fully effective in about six years, will generate savings of $2.4 billion annually in medical care, lost wages, death and disability benefits and other costs that will not have to be paid.

Fourth, it means lower insurance costs. Some insurance companies are already offering discounts for cars equipped with air bags, and they estimate that insurance premiums could be cut by $400 over the life of a car that has air bags or other workable automatic crash protection. After the federal safety standard takes effect, competitive forces in the insurance business will assure that companies will take into account the cost-saving benefits of this protection.

Lowell R. Beck is president of the National Association of Independent Insurers, a Des Plaines-based organization that represents more than 500 insurance companies.

Finally, sales of new cars should not be affected adversely by the new safety standard. In times of economic uncertainty like these, car sales may indeed rise or fall, but the reason will not be the installation of a single safety device. Contrary to the fearful predictions of automakers, it has been reliably documented before Congress that air bags, for instance, cost approximately $200 to install, about the price of a good stereo radio or wheel covers. Balanced against that are studies — the latest by General Motors itself — that show that from 25 to 50 percent of new car buyers would pay more than $300 for air bags if they were available.

IN ANY CASE, America is moving to smaller and less crashworthy cars. As that trend expands and traffic deaths increase (they are expected to reach 70,000 by 1990), occupant protection will become a powerful sales feature. So far, Detroit has failed to exploit the selling power of safety, but its foreign competitors have not. This year, for instance, Mercedes-Benz installed air bags on its models, although they are being sold only in Europe. By turning automakers' attention to a new and unexploited sales tool, the new safety standard could very well help pull Detroit out of its slump.

One other positive result of the court's decision should also be mentioned. This case, brought against NHTSA by the National Association of Independent Insurers and State Farm Mutual Insurance Co., was widely interpreted as a crucial test of the Reagan administration's deregulation policies. This defeat of mistaken deregulation does not mean the end of deregulation efforts. On the contrary, the decision strengthens President Reagan's deregulatory campaign by putting it on the right track.

In its ruling, the court listed a number of actions that NHTSA could have taken, such as analyzing alternatives to rescinding the standard and verifying cost and compliance claims. Such guidelines will be invaluable aids to other potential deregulators, who can now steer around the rocks and shoals that NHTSA hit.

[ATTACHMENT D]

The Los Angeles Times June 24, 1982

Despite Detroit's Aloofness, Auto Safety Will Sell

By LOWELL R. BECK

Most Americans know by now that U.S. auto makers are having financial difficulties. And so, it is argued, we ought not do anything to impose additional burdens on Detroit, such as requiring auto manufacturers to install air bags or other automatic crash-protection devices in new cars.

In effect, we should go on allowing 10,000 people to die unnecessarily each year in automobile accidents, even though we know that technology exists to put a stop to such tragedy. This is what critics of a recent appeals court decision to reinstate a federal passive-restraint standard for new cars seem to be saying.

In spite of voluminous documentation presented to Congress and the National Highway Traffic Safety Administration that passive restraints such as the air bag could save 10,000 lives annually, critics of the safety standard say that Detroit should not be bothered with it right now, that car makers' economic problems are far more important.

Of course, those who have criticized the decision (by the U.S. Court of Appeals for the District of Columbia) would never admit to arguing in favor of death and injury. They would prefer to avoid that bottom-line truth, saying instead that the public deserves the right to choose which safety devices it wants.

All of us favor freedom of choice. But, at present, cars are not being produced with any kind of automatic crash protection, and the federal standard is necessary precisely to give the public an opportunity to choose.

Certainly no one wants to add to Detroit's current problems, but it is difficult to understand just how the installation of a single safety device would compound them. In fact, the federal passive-restraint standard could help to provide much-needed relief in the sense that it would give American car makers an important new sales tool.

That safety is a marketable commodity is well-demonstrated by General Motors' own studies showing that 70% of new-car buyers desire air bags over automatic or manual seat belts, even at a cost of $300 per car. Suppliers have testified that, on a mass-production basis, an air-bag system would cost only $185 per car—less than the price of many vanity options such as tape decks.

Occupant protection will become an even more powerful sales feature as the trend toward smaller and less-crashworthy cars expands and traffic deaths increase (they are expected to reach 70,000 by 1990). So far, however, Detroit has failed to exploit the selling power of safety, but its foreign competitors have not. This year, for instance, Mercedes-Benz installed air bags in its models to be sold in Europe.

Does this mean that foreign car manufacturers will come into this country once again and out-compete Detroit with new and infinitely more effective occupant protection? Does it mean that the foreign manufacturers recognize more fully than Detroit what the American public really wants? Wouldn't American auto makers capture the competitive advantage by seeing to it, now, that their new cars are equipped with air bags?

In any event, if and when the passive-restraint standard becomes fully implemented, *all* manufacturers would be required to install automatic crash protection. Therefore, the argument that Detroit would be penalized is without foundation.

Finally, it is asked by critics of the passive-restraint standard, why not simply encourage drivers to use their manual belts? In spite of all such attempts over the years to do just that, only 10% of the nation's motoring population uses the manual belt. That is exactly why an automatic passive restraint is better: It requires no action on the part of the driver to save lives.

From any standpoint, the appeals court decision was the right one, but what does it mean specifically to the public?

First, assuming that the National Highway Traffic Safety Administration does not appeal the court decision and presses ahead with compliance from the automobile manufacturers, it means that all new cars, starting with the 1984 models, will be equipped with crash protection of some kind.

Second, it means a substantial reduction in the outrageous carnage that takes place every day on our streets and highways. Experts have predicted that, when all cars have crash protection, not only will 10,000 lives be saved annually but tens of thousands of serious injuries will be prevented as well.

Third, it means lower costs. It has been conservatively estimated that the passive-restraint standard, when fully effective in about six years, will generate savings to society of $2.4 billion currently spent each year for medical care, lost wages, death and disability benefits and other costs.

Fourth, it means lower insurance costs. Some insurance companies are already offering discounts for cars equipped with air bags, and they estimate that insurance premiums could be cut by $400 over the life of a car that has air bags or other workable automatic crash protection.

In light of all these important advantages, can American motorists afford to drive without effective, and proven, automatic crash protection? The facts clearly say no.

Lowell R. Beck is president of the National Assn. of Independent Insurers, which represent more than 500 property- and casualty-insurance companies that write nearly half the country's private auto insurance.

Senator HUMPHREY. The hearing is now concluded.

[Whereupon, at 12:52 p.m., the subcommittee was adjourned.]

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